

Study of mutagenic effects of Sodium Meta-Bisulfite
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FDA Compound #71-22

H27

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STUDY OF MUTAGENIC EFFECTS OF SODIUM META-BISULFITE (71-22)

Prepared for:

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INTRODUCTION

Under contract to the Food and Drug Administration, Stanford Research Institute is examining the mutagenicity of 14 selected chemical compounds (Contract No. FDA 71-267). This report describes the results of tests conducted on Sodium Metabisulfite (71-22).

Three methods are used to evaluate the genetic hazards of the test compounds. These are: (1) Host-Mediated Assay, (2) Cytogenetic Assay, and (3) Dominant Lethal Gene Test. Methodologies used to conduct these tests are described in detail in "Compound Report No. 1," January 1972. The same procedures were followed in obtaining the information presented in this report.

For the compound under consideration here single and repeated intubations were performed at three concentrations. These amounts were (1) a maximum tolerated dose or 5 g/kg, whichever was lower, (2) a low dose of 30 mg/kg or one near the use level, and (3) a level intermediate between the use level and the maximum tolerated dose.

SUMMARY

Host-Mediated Assay

Sodium metabisulfite (71-22) did not produce any measurable mutagenic response or alteration in the recombination frequency for Saccharomyces cerevisiae in either the host-mediated assay or the associated in vitro tests.

Cytogenetic Assay

Sodium metabisulfite (71-22) exhibits no adverse effect on metaphase chromosomes from rat bone marrow at any of the dose levels or time periods tested.

It causes mitotic inhibition and widespread damage to anaphase cells tested in vitro and obtained from human embryonic lung cells (WI-38) grown in tissue culture.

Dominant Lethal Gene Test

No consistent responses occurred to suggest that sodium meta-bisulfite (71-22) is mutagenic to the rat by this experimental procedure. The positive reference compound, TEM, a known mutagen, generally produced mutagenic responses from the first through the fifth weeks of the experiment, as expected. Mathematical treatment of the Dominant Lethal Gene data, according to the statistical program outlined by FDA, failed to show consistent significant differences (which could be attributed to an effect of sodium meta-bisulfite) at $P<0.01$, $P<0.05$, and $P<0.10$.

However, there was a greater frequency of significant differences at the $P<0.20$ level, suggestive of a mutagenic effect. This finding at $P<0.20$ suggests that consideration be given to test sodium meta-bisulfite again, using a greater number of females per group, or the more extensive translocation test should be applied to this compound.

RESULTS AND DISCUSSION

Oral Toxicity

Single and multiple dose toxicity data are presented in Table 1. The oral LD₅₀ for sodium meta-bisulfite (71-22) given as a solution in water was 2.48 g/kg, while the multiple dose LD₅₀ was 1.80 g/kg. After an examination of the LD₅₀ data, mutagenesis assay dosage levels of 1.2 g/kg, 0.7 g/kg, and 30 mg/kg were selected for both single and multiple treatment groups.

Host-Mediated Assay

Table 2 presents a summary of the host-mediated assay results for Sodium metabisulfite (71-22). Table 3 contains the data obtained on each individual mouse. This table is a computer printout of the calculations made on the data obtained for each mouse. Because of the nature of the computer, it is necessary to exceed its maximum number of significant figures to obtain a value as an exponent. For this reason, 12 significant figures are printed out. However, only three significant figures are used for calculations and reporting the results as summarized in Table 2. Table 4 summarizes the data obtained in the in vitro tests.

As can be seen from the results summarized in Table 2, no mutagenic response was observed for the two Salmonella typhimurium strains tested when mice were treated with the test compound. The mitotic recombination frequency of Saccharomyces cerevisiae was not affected. Similarly, no positive mutagenic response was detected in the in vitro tests.

Cytogenetic Assay

Review of Table 5 indicates that no adverse effect on rat bone marrow chromosomes at any tested dose level or time period may be attributed to Sodium metabisulfite.

Table 6 indicates that sodium metabisulfite causes mitotic inhibition proportional to the dose level. In addition, a sharp increase in the number of aberrant cells can be observed for the low and intermediate dose levels. Quite possibly the small increase seen at the highest dose level results from the few cells scored rather than indicating a reduced adverse effect at this dose. The increased number of abnormal anaphases due to sodium metabisulfite results from widespread damage to the chromosomes. There is a distinct increase in the number of acentric fragments and bridges observed, indicating that it causes multiple breakage in the chromosomes. There is also a sharp increase in the number of

cells scored as "other". Cells were scored as other when the two sets of chromosomes were broken up into numerous small clusters with no particular polar orientation. Sodium metabisulfite thus exhibits a strong adverse effect on WI-38 cells grown in culture and tested in vitro.

Dominant Lethal Gene Test

Throughout the experiment the biological criteria used to evaluate mutagenic effects in the rat showed no consistent responses which could be attributed to treatment. There were occasional statistical differences between control and sodium meta-bisulfite-dosed groups at $P<0.01$, $P<0.05$, and $P<0.10$ without any suggestion of a time or dose-response effect. However, at $P<0.20$ indications of an effect were evident, which suggest that this study should be repeated.

Table 7 presents summary data of the implantations per pregnant female, Table 8 summarizes dead implants per pregnant female, Table 9 summarizes dead implants per total implants, Table 10 summarizes corpora lutea per pregnant female, and Table 11 summarizes pre-implantation loss per pregnant female.

Appendix A presents a description of the statistical analysis procedures for dominant lethal gene tests with an explanation of the computer printouts.

Appendix B contains computer printouts of the raw data and statistical analyses of them.

Careful review and statistical evaluation of the data do not show sodium meta-bisulfite to be a mutagen in the rat by the dominant lethal gene test; however, indications of a trend at $P<0.20$ suggest that this compound should be studied again, using a greater number of animals to determine if these indications are indeed a real effect of the compound.

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ORAL TOXICITY - RAT

Table 1

Compound: Sodium Meta-Bisulfite
FDA No: 71-22

Dosage Regimen	LD ₅₀ (g/kg)	95% Confidence Limits (g/kg)
Single Dose	2.48	1.97 to 3.12
Multiple Dose	1.8	No fractional mortality therefore unable to calculate confidence limits.

Table 2
HOST MEDIATED ASSAY
SUMMARY OF DATA

Compound No.: 71-22 (Sodium Metabisulfite)

A. Acute

Treatment	Organism						
	Salmonella			Saccharomyces			
	G46	TA 1530	D-3	MF	MFT/ MFC	RF	RFT/ RFC
Maximum	1.22 X 10 ⁻⁸	1.36	1.26 X 10 ⁻⁸	0.23	2.14 X 10 ⁻⁴	1.10	
Intermediate	4.83 X 10 ⁻⁹	0.51	6.54 X 10 ⁻⁸	1.20	1.53 X 10 ⁻⁴	0.79	
Low Level	3.01 X 10 ⁻⁹	0.34	2.61 X 10 ⁻⁸	0.48	1.33 X 10 ⁻⁴	0.69	
Control (+)	1.10 X 10 ⁻⁶	123.18	6.86 X 10 ⁻⁷	12.63	8.83 X 10 ⁻⁴	4.55	
Control (-)	8.93 X 10 ⁻⁹	1.00	5.43 X 10 ⁻⁸	1.00	1.94 X 10 ⁻⁴	1.00	

B. Subacute

Treatment	Organism						
	Salmonella			Saccharomyces			
	G46	TA 1530	D-3	MF	MFT/ MFC	RF	RFT/ RFC
Maximum	8.45 X 10 ⁻⁹	1.67	2.80 X 10 ⁻⁸	0.62	9.06 X 10 ⁻⁵	0.53	
Intermediate	9.22 X 10 ⁻⁹	1.82	3.62 X 10 ⁻⁸	0.80	1.40 X 10 ⁻⁴	0.72	
Low Level	6.63 X 10 ⁻⁹	1.31	7.44 X 10 ⁻⁸	1.64	7.83 X 10 ⁻⁵	0.46	
Control (-)	5.06 X 10 ⁻⁹	1.00	4.55 X 10 ⁻⁸	1.00	1.71 X 10 ⁻⁴	1.00	

Table 3
HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATA

Compound No.: 71-22 (Sodium metabisulfite)

Organism: G-46

Treatment: CONTROL (+)

A. Acute

Mouse No.	Ave. No. Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.824166666665ex 03	.878333333330ex 09	.938330170779ex-06
2	.708333333330ex 03	.646666666665ex 09	.109536082473ex-05
3	.464166666666ex 03	.405000000000ex 09	.114609053497ex-05
4	.717500000000ex 03	.648333333330ex 09	.110668380463ex-05
5	.857500000000ex 03	.416666666666ex 09	.205800000000ex-05
6	.746666666665ex 03	.126333333333ex 10	.591029023746ex-06
7	.415000000000ex .03	.251666666666ex 09	.164900662252ex-05
8	.635833333330ex 03	.116666666666ex 10	.545000000000ex-06
9	.790000000000ex 03	.708333333330ex 09	.111529411765ex-05
10	.219166666666ex 03	.281666666666ex 09	.778106508875ex-06
			.110229016078ex-05

B. Subacute

Mouse No.	Ave. No. Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: G-46Treatment: (-) CONTROL

A. Acute

Mouse No.	Ave. No. Mutant	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
	Colonies or Recombinants/ml		
1	.333333333333ex 01	.84000000000ex 09	.396825396825ex-08
2	.833333333330ex 00	.786666666665ex 09	.105932203389ex-08
3	.383333333323ex 02	.94500000000ex 09	.405643738976ex-07
4	.166666666666ex 01	.149333333333ex 10	.111607142856ex-08
5	.500000000000ex 01	.10200000000ex 10	.490196078431ex-08
6	.183333333333ex 02	.135166666666ex 10	.135635018496ex-07
7	.833333333330ex 00	.14000000000ex 10	.595238095235ex-09
8	.583333333330ex 01	.10250000000ex 10	.569105691053ex-08
			.893247237097ex-08

B. Subacute

Mouse No.	Ave. No. Mutant	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
	Colonies or Recombinants/ml		
1	.166666666666ex 01	.93000000000ex 09	.179211469533ex-08
2	.833333333330ex 00	.37000000000ex 09	.225225225224ex-08
3	.833333333330ex 00	.15000000000ex 09	.555555555553ex-08
4	.333333333333ex 01	.641666666665ex 09	.519480519481ex-08
5	.833333333330ex 00	.431666666666ex 09	.193050193049ex-08
6	.166666666666ex 01	.10500000000ex 09	.158730158729ex-07
7	.333333333333ex 01	.78000000000ex 09	.427350427350ex-08
8	.250000000000ex 01	.695000000000ex 09	.359712230215ex-08
			.505860900960ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: G-46Treatment: MAXIMUM

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.75000000000ex 01	.666666666665ex 09	.11250000000ex-07
2	.10000000000ex 02	.47500000000ex 10	.210526315789ex-08
3	.30000000000ex 02	.103333333333ex 10	.290322580646ex-07
4	.166666666666ex 01	.51500000000ex 09	.323624595467ex-08
5	.141666666666ex 02	.93500000000ex 09	.151515151514ex-07
6	.108333333333ex 02	.846666666665ex 09	.127952755905ex-07
7	.916666666665ex 01	.76000000000ex 09	.120614035087ex-07
			.122331373468ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.142857142857ex 01	.816666666665ex 09	.174927113702ex-08
2	.833333333330ex 00	.306666666666ex 09	.271739130434ex-08
3	.333333333333ex 01	.591666666665ex 09	.563380281691ex-08
4	.333333333333ex 01	.580000000000ex 09	.574712643677ex-08
5	.333333333333ex 01	.633333333330ex 09	.526315789475ex-08
6	.833333333330ex 00	.788333333330ex 09	.105708245243ex-08
7	.750000000000ex 01	.175000000000ex 09	.428571428571ex-07
8	.250000000000ex 01	.975000000000ex 09	.256410256410ex-08
			.844863468290ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: G-46Treatment: INTERMEDIATE

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.50000000000ex 01	.14083333333ex 10	.355029585799ex-08
2	.33333333333ex 01	.11033333333ex 10	.302114803625ex-08
3	.25000000000ex 01	.741666666665ex 09	.337078651686ex-08
4	.583333333330ex 01	.51500000000ex 09	.113268608413ex-07
5	.25000000000ex 01	.89333333330ex 09	.279850746269ex-08
6	.20000000000ex 01	.91833333330ex 09	.217785843920ex-08
7	.833333333330ex 01	.11033333333ex 10	.755287009062ex-08
			.482833246354ex-08

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.20833333333ex 02	.78833333330ex 09	.264270613108ex-07
2	.33333333333ex 01	.71333333330ex 09	.467289719627ex-08
3	.166666666666ex 01	.110000000000ex 09	.151515151514ex-07
4	.250000000000ex 01	.446666666666ex 09	.559701492538ex-08
5	.416666666666ex 01	.660000000000ex 09	.631313131312ex-08
6	.833333333330ex 00	.593333333330ex 09	.140449438202ex-08
7	.416666666666ex 01	.841666666665ex 09	.495049504950ex-08
			.921665847547ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: G-46Treatment: LOW

A. Acute

Mouse No.	Ave. No. Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.166666666666ex 01	.113500000000ex 10	.146842878119ex-08
2	.416666666666ex 01	.958333333330ex 09	.434782608696ex-08
3	.833333333330ex 00	.102333333333ex 10	.814332247556ex-09
4	.166666666666ex 01	.830000000000ex 09	.200803212850ex-08
5	.250000000000ex 01	.780000000000ex 09	.320512820512ex-08
6	.416666666666ex 01	.146333333333ex 10	.284738041002ex-08
7	.333333333333ex 01	.181666666666ex 10	.183486238532ex-08
8	.833333333330ex 01	.110000000000ex 10	.757575757572ex-08
			.301271847753ex-08

B. Subacute

Mouse No.	Ave. No. Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.166666666666ex 01	.631666666665ex 09	.263852242743ex-08
2	.333333333333ex 01	.590000000000ex 09	.564971751411ex-08
3	.833333333330ex 00	.605000000000ex 09	.137741046831ex-08
4	.333333333333ex 01	.141666666666ex 09	.235294117647ex-07
5	.250000000000ex 01	.696666666665ex 09	.358851674642ex-08
6	.833333333330ex 00	.688333333330ex 09	.121065375302ex-08
7	.333333333333ex 01	.658333333330ex 09	.506329113926ex-08
8	.333333333333ex 01	.705000000000ex 09	.472813238770ex-08
9	.166666666666ex 01	.578333333330ex 09	.288184438040ex-08
10	.833333333330ex 00	.533333333330ex 08	.156250000000ex-07
			.662925005812ex-08

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: TA-1530Treatment: CONTROL (+)

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.316666666666ex 03	.681666666665ex 09	.464547677261ex-06
2	.375833333333ex 03	.316666666666ex 09	.118684210526ex-05
3	.453000000000ex 03	.791666666665ex 09	.572210526316ex-06
4	.250833333333ex 03	.49000000000Gex 09	.511904761904ex-06
5	.535833333330ex 03	.813333333330ex 09	.658811475408ex-06
6	.174166666666ex 03	.635000000000ex 09	.274278215222ex-06
7	.397500000000ex 03	.498333333333ex 09	.797658862876ex-06
8	.333333333333ex 03	.401666666666ex 09	.829875518672ex-06
9	.671666666665ex 03	.763333333330ex 09	.879912663757ex-06
			.686226867404ex-06

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: TA-1530Treatment: CONTROL (-)

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.125000000000ex 02	.340000000000ex 09	.367647058823ex-07
2	.750000000000ex 01	.255000000000ex 09	.294117647058ex-07
3	.666666666665ex 01	.295000000000ex 09	.225988700564ex-07
4	.175000000000ex 02	.250000000000ex 09	.700000000000ex-07
5	.125000000000ex 02	.456666666666ex 09	.273722627737ex-07
6	.608333333330ex 02	.608750000000ex 09	.999315537297ex-07
7	.216666666666ex 02	.435000000000ex 09	.498084291186ex-07
8	.733333333330ex 02	.743333333330ex 09	.986547085201ex-07
			.543177868480ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.166666666666ex 02	.30333333333ex 09	.549450549448ex-07
2	.833333333330ex 01	.190000000000ex 09	.438596491226ex-07
3	.275000000000ex 02	.420000000000ex 09	.654761904761ex-07
4	.308333333333ex 02	.786666666665ex 09	.391949152542ex-07
5	.191666666666ex 02	.693333333330ex 09	.276442307692ex-07
6	.183333333333ex 02	.373333333333ex 09	.491071428570ex-07
7	.100000000000ex 02	.263333333333ex 09	.379746835443ex-07
			.454574095667ex-07

Table 3 (continued)

HOST-MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: TA-1530Treatment: MAXIMUM

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.20833333333ex 02	.83333333330ex 09	.25000000000ex-07
2	.13333333333ex 02	.51333333330ex 09	.25974025974lex-07
3	.14166666666ex 02	.73833333330ex 09	.191873589164ex-07
4	.17500000000ex 02	.62166666665ex 10	.281501340483ex-08
5	.13750000000ex 02	.35333333333ex 10	.389150943396ex-08
6	.22500000000ex 02	.40666666666ex 10	.553278688525ex-08
7	.15000000000ex 02	.25500000000ex 10	.588235294117ex-08
			.126118639365ex-07

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.19166666666ex 02	.75333333330ex 09	.25442477876lex-07
2	.10000000000ex 02	.32000000000ex 09	.31250000000ex-07
3	.16666666666ex 02	.35666666666ex 09	.467289719625ex-07
4	.41666666666ex 01	.48166666666ex 09	.865051903114ex-08
5	.15833333333ex 02	.38333333333ex 09	.413043478260ex-07
6	.66666666665ex 01	.24333333333ex 09	.273972602739ex-07
7	.66666666665ex 01	.44000000000ex 09	.151515151514ex-07
			.27989298874lex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: TA-1530Treatment: INTERMEDIATE

A. Acute

Mouse No.	Ave. No. Colonies or Recombinants/ml	Ave. No. Mutant	Mutation or Recombination Frequency
		Colonies or Recombinants/ml	Forming Units/ml
1	.150000000000ex 02	.22333333333ex 09	.671641791045ex-07
2	.40000000000ex 02	.59833333330ex 09	.668523676883ex-07
3	.24166666666ex 02	.44166666666ex 09	.547169811320ex-07
4	.21666666666ex 02	.595000000000ex 09	.364145658262ex-07
5	.10833333333ex 02	.39833333333ex 09	.271966527196ex-07
6	.11666666666ex 02	.800000000000ex 08	.14583333332ex-06
7	.58333333330ex 01	.61666666665ex 08	.945945945943ex-07
8	.31666666666ex 02	.56666666665ex 09	.558823529412ex-07
9	.18333333333ex 02	.460000000000ex 09	.398550724636ex-07
			.653900110887ex-07

B. Subacute

Mouse No.	Ave. No. Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
		Colonies or Recombinants/ml	Forming Units/ml
1	.25833333333ex 02	.11383333333ex 10	.226939970717ex-07
2	.17500000000ex 02	.3683333333ex 09	.475113122172ex-07
3	.15833333333ex 02	.41166666666ex 09	.384615384615ex-07
4	.11666666666ex 02	.53166666665ex 09	.219435736676ex-07
5	.11666666666ex 02	.14500000000ex 09	.804597701144ex-07
6	.33333333333ex 01	.49333333333ex 09	.675675675675ex-08
7	.13333333333ex 02	.55166666665ex 09	.241691842900ex-07
8	.11666666666ex 02	.24500000000ex 09	.476190476187ex-07
			.362018975243ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: TA-1530Treatment: LOW

A. Acute

Mouse No.	Ave. No. Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.133333333333ex 02	.293333333333ex 09	.454545454544ex-07
2	.666666666665ex 01	.293333333333ex 09	.227272727272ex-07
3	.141666666666ex 02	.476666666666ex 09	.297202797201ex-07
4	.116666666666ex 02	.866666666665ex 09	.134615384614ex-07
5	.857142857140ex 01	.725000000000ex 09	.118226600984ex-07
6	.183333333333ex 02	.905000000000ex 09	.202578268876ex-07
7	.200000000000ex 02	.124000000000ex 10	.161290322580ex-07
8	.108333333333ex 02	.375000000000ex 09	.288888888888ex-07
9	.666666666665ex 01	.145000000000ex 09	.459770114941ex-07
			.260487839986ex-07

B. Subacute

Mouse No.	Ave. No. Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.383333333333ex 02	.401666666666ex 09	.954356846473ex-07
2	.316666666666ex 02	.221666666666ex 09	.142857142857ex-06
3	.280000000000ex 02	.570000000000ex 09	.491228070175ex-07
4	.250000000000ex 02	.228333333333ex 09	.109489051095ex-06
5	.225000000000ex 02	.686666666665ex 09	.327669902913ex-07
6	.191666666666ex 02	.265000000000ex 09	.723270440249ex-07
7	.270000000000ex 02	.325000000000ex 09	.830769230769ex-07
8	.166666666666ex 02	.345000000000ex 09	.483091787437ex-07
9	.583333333330ex 01	.160000000000ex 09	.364583333331ex-07
			.744270172314ex-07

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: D-3Treatment: (+) CONTROL

A. Acute

Mouse No.	Ave. No. Colonies or Recombinants/ml	Ave. No. Mutant	Mutation or Recombination Frequency
		Colonies or Recombinants/ml	Forming Units/ml
1	.27000000000ex 05	.36333333333ex 08	.743119266055ex-03
2	.21500000000ex 05	.22166666666ex 08	.969924812032ex-03
3	.19500000000ex 05	.65000000000ex 08	.30000000000ex-03
4	.2/000000000ex 05	.37666666666ex 08	.716814159293ex-03
5	.34500000000ex 05	.46333333333ex 08	.744604316547ex-03
6	.31500000000ex 05	.31000000000ex 08	.101612903225ex-02
7	.38500000000ex 05	.20833333333ex 08	.18480000000ex-02
8	.31000000000ex 05	.23166666666ex 08	.133812949640ex-02
9	.13500000000ex 05	.49666666666ex 08	.271812080537ex-03
			.883170351454ex-03

B. Subacute

Mouse No.	Ave. No. Colonies or Recombinants/ml	Ave. No. Mutant	Mutation or Recombination Frequency
		Colonies or Recombinants/ml	Forming Units/ml

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: D-3Treatment: (-) CONTROL

A. Acute

Mouse No.	Ave. No. Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.50000000000ex 04	.34666666666ex 08	.144230769231ex-03
2	.45000000000ex 04	.26000000000ex 08	.173076923076ex-03
3	.30000000000ex 04	.36500000000ex 08	.958904109589ex-04
4	.20000000000ex 04	.44166666666ex 08	.452830188679ex-04
5	.50000000000ex 04	.61166666665ex 08	.817438692100ex-04
6	.90000000000ex 04	.44500000000ex 08	.20224719101lex-03
7	.35000000000ex 04	.22666666666ex 08	.154411764706ex-03
8	.40000000000ex 04	.17500000000ex 08	.228571428571ex-03
9	.95000000000ex 04	.15500000000ex 08	.612903225806ex-03
10	.30000000000ex 04	.14925000000ex 08	.201005025125ex-03
			.193936362655ex-03

B. Subacute

Mouse No.	Ave. No. Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.40000000000ex 04	.19166666666ex 08	.208695652174ex-03
2	.25000000000ex 04	.19000000000ex 08	.131578947368ex-03
3	.25000000000ex 04	.25333333333ex 08	.986842105264ex-04
4	.50000000000ex 04	.31500000000ex 08	.158730158730ex-03
5	.55000000000ex 04	.19500000000ex 08	.282051282051ex-03
6	.20000000000ex 04	.13375000000ex 08	.149532710280ex-03
7	.35000000000ex 04	.19833333333ex 08	.176470588235ex-03
8	.40000000000ex 04	.23833333333ex 08	.167832167832ex-03
9	.25000000000ex 04	.17700000000ex 08	.141242937853ex-03
10	.30000000000ex 04	.15333333333ex 08	.195652173913ex-03
			.171047082894ex-03

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: D-3Treatment: MAXIMUM

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.30000000000ex 04	.16666666666ex 08	.18000000000ex-03
2	.30000000000ex 04	.10625000000ex 08	.282352941176ex-03
3	.20000000000ex 04	.11300000000ex 08	.176991150442ex-03
4	.40000000000ex 04	.49250000000ex 07	.812182741116ex-03
5	.35000000000ex 04	.50000000000ex 08	.70000000000ex-04
6	.25000000000ex 04	.18333333333ex 08	.136363636363ex-03
7	.25000000000ex 04	.27166666666ex 08	.920245398775ex-04
8	.45000000000ex 04	.37166666666ex 08	.121076233184ex-03
9	.15000000000ex 04	.25666666666ex 08	.584415584417ex-04
			.214381422286ex-03

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.30000000000ex 04	.26000000000ex 08	.115384615384ex-03
2	.50000000000ex 03	.11025000000ex 08	.453514739229ex-04
3	.50000000000ex 04	.563333333330ex 08	.887573964502ex-04
4	.45000000000ex 04	.46666666666ex 08	.964285714287ex-04
5	.45000000000ex 04	.43333333333ex 08	.103846153846ex-03
6	.44444444444ex 04	.568333333330ex 08	.782013685243ex-04
7	.50000000000ex 04	.643333333330ex 08	.777202072542ex-04
8	.45000000000ex 04	.42833333333ex 08	.105058365758ex-03
9	.40000000000ex 04	.38166666666ex 08	.104803493449ex-03
			.906168495572ex-04

Table 3 (continued)

HOST MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: D-3Treatment: INTERMEDIATE

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.750000000000ex 04	.73833333330ex 08	.101580135440ex-03
2	.200000000000ex 04	.450000000000ex 08	.44444444444ex-04
3	.900000000000ex 04	.51833333330ex 08	.173633440515ex-03
4	.950000000000ex 04	.790000000000ex 08	.120253164556ex-03
5	.950000000000ex 04	.265000000000ex 08	.358490566037ex-03
6	.250000000000ex 04	.19333333333ex 08	.129310344827ex-03
7	.400000000000ex 04	.280000000000ex 08	.142857142857ex-03
8	.350000000000ex 04	.220000000000ex 08	.159090909090ex-03
			.153707518470ex-03

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.400000000000ex 04	.48833333333ex 08	.819112627986ex-04
2	.550000000000ex 04	.52333333330ex 08	.105095541401ex-03
3	.150000000000ex 04	.18166666666ex 08	.825688073397ex-04
4	.650000000000ex 04	.42666666666ex 08	.152343750000ex-03
5	.700000000000ex 04	.235000000000ex 08	.297872340425ex-03
6	.300000000000ex 04	.25833333333ex 08	.116129032258ex-03
7	.150000000000ex 04	.16166666666ex 08	.927835051550ex-04
8	.400000000000ex 04	.260000000000ex 08	.153846153846ex-03
9	.400000000000ex 04	.225000000000ex 08	.177777777777ex-03
			.140036463443ex-03

Table 3 (concluded)

HOST-MEDIATED ASSAY
INDIVIDUAL MOUSE DATACompound No.: 71-22 (Sodium metabisulfite)Organism: D-3Treatment: LOW

A. Acute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.400000000000ex 04	.348333333333ex 08	.114832535885ex-03
2	.700000000000ex 04	.786666666665ex 08	.889830508476ex-04
3	.300000000000ex 04	.260000000000ex 08	.115384615384ex-03
4	.250000000000ex 04	.345000000000ex 08	.724637681159ex-04
5	.250000000000ex 04	.271666666666ex 08	.920245398775ex-04
6	.100000000000ex 04	.320000000000ex 07	.312500000000ex-03
7	.250000000000ex 04	.117250000000ex 08	.213219616204ex-03
8	.200000000000ex 04	.146666666666ex 08	.136363636364ex-03
9	.200000000000ex 04	.401666666666ex 08	.497925311204ex-04
			.132840477087ex-03

B. Subacute

Mouse No.	Ave. No. Mutant Colonies or Recombinants/ml	Ave. No. Colony Forming Units/ml	Mutation or Recombination Frequency
1	.600000000000ex 04	.321666666666ex 08	.186528497409ex-03
2	.250000000000ex 04	.303333333333ex 08	.824175824176ex-04
3	.100000000000ex 04	.133333333333ex 08	.750000000001ex-04
4	.200000000000ex 04	.230000000000ex 08	.869565217391ex-04
5	.150000000000ex 04	.246666666666ex 08	.608108108109ex-04
6	.250000000000ex 04	.441666666666ex 08	.566037735849ex-04
7	.300000000000ex 01	.253333333333ex 08	.118421052631ex-06
			.783479438587ex-04

Table 4

HOST-MEDIATED ASSAY
IN VITRO MUTAGENICITY OF COMPOUND 71-22 (Sodium metabisulfite)

Salmonella typhimurium G-46

5% w/v 71-22	EMS
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negative	positive
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Salmonella typhimurium TA-1530

5% w/v 71-22	EMS
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negative	positive
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Saccharomyces cerevisiae D-3

Compound	Concentration	Survival (%)	Recombinants/10 ⁵		RFT/RFC
			Survivors		
71-22	0.1% w/v	79	14.55		1.13
Control (-) for 71-22	--	100	12.86 ✓		1.00
EMS	0.1% w/v	86	289.79		74.50
Control (-) for EMS	--	100	3.89 ✓		1.00

Table 5
 CYTOGENETIC ASSAY
 METAPHASE SUMMARY SHEET BY TIME OF SACRIFICE
 Sodium Metabisulfite (71-22)

Dosage	Time*	Mitotic Index (%)	No. of Animals	No. of Cells	Cells with Breaks (%)	Cells with Rearrangements (%)	Cells with More than One Type of Aber. (%)	Cells with One Type of Aber. (%)
TEM (0.4 mg/kg)	24	2.05	5	250	36.0	7.2	5.6	37.6
Negative Control	6	1.95	3	150	1.3	0	0	1.3
30 mg/kg	6	2.20	5	250	0.4	0	0	0.4
700 mg/kg	6	2.25	5	250	0.8	0	0	0.8
1200 mg/kg	6	1.90	5	250	1.2	0	0	1.2
Negative Control	24	2.10	3	150	1.3	0	0	0
30 mg/kg	24	2.05	4	200	0	0	0	0.8
700 mg/kg	24	2.20	5	250	0.8	0	0	0
1200 mg/kg	24	1.65	5	250	0	0	0	0.7
Negative Control	48	2.20	3	150	0.7	0	0	1.6
30 mg/kg	48	1.70	5	250	1.6	0	0	1.2
700 mg/kg	48	1.60	5	250	1.2	0	0	0.4
1200 mg/kg	48	1.80	5	250	0.4	0	0	2.6
Negative Control	SA**	1.75	3	150	2.6	0	0	1.2
30 mg/kg	SA	2.35	5	250	0.8	0.4	0	0.8
700 mg/kg	SA	2.15	5	250	0.8	0	0	0.7
1200 mg/kg	SA	2.10	3	150	0.7	0	0	

* Time of sacrifice after treatment (hours)

** SA=Subacute

Table 6

CYTOGENETIC ASSAY
ANAPHASE SUMMARY SHEET
Sodium Metabisulfite (71-22)

Dosage	Time*	No. of Cells	Cells with Acentric Fragments (%)	Cells with Bridges (%)	Multipolar Cells (%)	Other (Abnormal) (%)	Cells with More than One Type Aber. (%)	Cells with Aber. (%)
Negative Control	24	263	6.1	2.3	0	2.3	1.9	8.7
2.5 µg/ml	24	171	13.5	7.0	0	5.8	5.3	19.9
25 µg/ml	24	96	13.5	4.2	2.1	7.3	6.3	20.8
250 µg/ml	24	16	6.3	0	0	6.3	0	12.5
TEM (0.05 µg/ml)	24	121	19.8	5.0	0	5.8	2.5	28.1

* Time of harvest after treatment (hours).

DOMINANT LETHAL GENE-RAT

Table 7.

AVERAGE IMPLANTATIONS PER PREGNANT FEMALE

Compound: Sodium Meta-Bisulfite
FDA No: 71-22

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-22 (30 mg/kg)	71-22 (0.7 g/kg)	71-22 (1.2 g/kg)
<u>Acute-Single Dose</u>					
1	211/18=11.7	201/20=10.1 ^b	203/18=11.3	225/20=11.3	218/19=11.5
2	248/20=12.4	154/20= 7.7 ^d	235/20=11.8	217/20=10.9 ^b	186/16=11.6
3	239/20=12.0	168/20= 8.4 ^d	232/18=12.9 ^{aI}	199/18=11.1	224/19=11.8
4	258/20=12.9	77/16= 4.8 ^d	237/20=11.9 ^a	234/20=11.7 ^a	214/20=10.7 ^c
5	225/20=11.3	204/20=10.2	209/19=11.0	235/20=11.8	196/20= 9.8 ^a
6	251/20=12.6	180/17=10.6 ^c	207/19=10.9 ^c	228/19=12.0	189/16=11.8
7	244/20=12.2	237/20=11.9 ^c	242/20=12.1	227/20=11.4	213/20=10.7 ^b
8	223/19=11.7	226/20=11.3	203/20=10.2 ^b	238/20=11.9	233/19=12.3
<u>Subacute-Multiple Dose</u>					
1		189/18=10.5	163/14=11.6	222/18=12.3	
2		230/19=12.1	208/18=11.6	208/19=10.9	
3		206/19=10.8 ^a	191/18=10.6 ^a	224/20=11.2	
4		232/20=11.6 ^b	229/20=11.5 ^c	236/20=11.8 ^c	
5		238/20=11.9	191/17=11.2	231/20=11.6	
6		214/19=11.3 ^b	208/17=12.2	210/18=11.7	
7		227/20=11.4	173/16=10.8 ^a	222/20=11.1	

a Significant at $P < 0.20$

b Significant at $P < 0.10$

c Significant at $P < 0.05$

d Significant at $P < 0.01$

I Increased above control

DOMINANT LETHAL GENE-RAT

Table 8

AVERAGE DEAD IMPLANTS PER PREGNANT FEMALE

Compound: Sodium Meta-Bisulfite
 FDA No: 71-22

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-22 (30 mg/kg)	71-22 (0.7 g/kg)	71-22 (1.2 g/kg)
<u>Acute-Single Dose</u>					
1	8/18=0.44	53/20=2.65 ^d	18/18=1.00	20/20=1.00	18/19=0.95
2	20/20=1.00	129/20=6.45 ^d	8/20=0.40 ^{aD}	15/20=0.75	22/16=1.38
3	22/20=1.10	127/20=6.35 ^d	11/18=0.61	11/18=0.61	33/19=1.74
4	12/20=0.60	84/16=5.25 ^d	19/20=0.95	17/20=0.85	30/20=1.50
5	22/20=1.10	65/20=3.25 ^d	19/19=1.00	15/20=0.75	13/20=0.65
6	13/20=0.65	19/17=1.12 ^a	11/19=0.58	15/19=0.79	14/16=0.88
7	16/20=0.80	29/20=1.45 ^a	18/20=0.90	8/20=0.40	34/20=1.70 ^a
8	7/19=0.37	21/20=1.05 ^c	20/20=1.00 ^b	21/20=1.05 ^a	20/19=1.05 ^b
<u>Subacute-Multiple Dose</u>					
1		33/18=1.83 ^c	2/14=0.14 ^{aD}	13/18=0.72	
2		28/19=1.47	8/18=0.44	23/19=1.21	
3		31/19=1.63	16/18=0.89	15/20=0.75	
4		51/20=2.55 ^d	8/20=0.40	21/20=1.05	
5		28/20=1.40	11/17=0.65	15/20=0.75	
6		31/19=1.63 ^b	9/17=0.53	11/18=0.61	
7		35/20=1.75 ^a	10/16=0.63	8/20=0.40	

a Significant at P <0.20

b Significant at P <0.10

c Significant at P <0.05

d Significant at P <0.01

D Decreased below control

DOMINANT LETHAL GENE-RAT

Table 9

DEAD IMPLANTS/TOTAL IMPLANTS

Compound: Sodium Meta-Bisulfite
FDA No: 71-22

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-22 (30 mg/kg)	71-22 (0.7 g/kg)	71-22 (1.2 g/kg)
<u>Acute-Single Dose</u>					
1	8/211=0.04	53/201=0.26 ^d	18/203=0.09	20/225=0.09	18/218=0.08
2	20/248=0.08	129/154=0.84 ^d	8/235=0.03	15/217=0.07	22/186=0.12 ^a
3	22/239=0.09	127/168=0.76 ^d	11/232=0.05	11/199=0.06	33/224=0.15
4	12/258=0.05	74/ 77=0.96 ^d	19/237=0.08	17/234=0.07	30/214=0.14 ^a
5	22/225=0.10	65/204=0.32 ^d	19/209=0.09	15/235=0.06	13/196=0.07
6	13/251=0.05	19/180=0.11 ^b	11/207=0.05	15/228=0.07	14/189=0.07
7	16/244=0.07	29/237=0.12 ^b	18/242=0.07	8/227=0.04	34/213=0.16 ^b
8	7/223=0.03	21/226=0.09 ^c	20/203=0.10 ^c	21/238=0.09 ^a	20/233=0.09 ^b
<u>Subacute-Multiple Dose</u>					
1		33/189=0.17 ^d	2/163=0.01	13/222=0.06	
2		28/230=0.12	8/208=0.04	23/208=0.11	
3		31/206=0.15	16/191=0.08	15/224=0.07	
4		51/232=0.22 ^d	8/229=0.03	21/236=0.09	
5		28/238=0.12	11/191=0.06	15/231=0.06	
6		31/214=0.14 ^c	9/208=0.04	11/210=0.05	
7		35/227=0.15 ^a	10/173=0.06	8/222=0.04	

a Significant at P <0.20

b Significant at P <0.10

c Significant at P <0.05

d Significant at P <0.01

DOMINANT LETHAL GENE-RAT

Table 10

AVERAGE CORPORA LUTEA PER PREGNANT FEMALE

Compound: Sodium Meta-Bisulfite
 FDA No: 71-22

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-22 (30 mg/kg)	71-22 (0.7 g/kg)	71-22 (1.2 g/kg)
<u>Acute-Single Dose</u>					
1	235/18=13.1	267/20=13.4	250/18=13.9 ^{aI}	240/20=12.0 ^b	239/19=12.6
2	258/20=12.9	239/20=12.0 ^a	265/20=13.3	255/20=12.8	204/16=12.8
3	253/20=12.7	249/20=12.5	246/18=13.7 ^{bI}	232/18=12.9	238/19=12.5
4	268/20=13.4	222/16=13.9	262/20=13.1	265/20=13.3	276/20=13.8
5	248/20=12.4	241/20=12.1	240/19=12.6	257/20=12.9	240/20=12.0
6	266/20=13.3	208/17=12.2 ^c	236/19=12.4 ^c	238/19=12.5 ^a	207/16=12.9
7	282/20=14.1	265/20=13.3	270/20=13.5	255/20=12.8 ^a	252/20=12.6 ^b
8	249/19=13.1	259/20=13.0	250/20=12.5	255/20=12.8	242/19=12.7
<u>Subacute-Multiple Dose</u>					
1		242/18=13.4	182/14=13.0	251/18=13.9	
2		253/19=13.3	234/18=13.0	239/19=12.6	
3		231/19=12.2	226/18=12.6	257/20=12.9	
4		248/20=12.4 ^a	257/20=12.9	268/20=13.4	
5		258/20=12.9	219/17=12.9	255/20=12.8	
6		244/19=12.8	230/17=13.5	246/18=13.7	
7		255/20=12.8 ^b	202/16=12.6 ^b	246/20=12.3 ^c	

a Significant at P < 0.20

b Significant at P < 0.10

c Significant at P < 0.05

I Increased above control

DOMINANT LETHAL GENE-RAT

Table 11

AVERAGE PREIMPLANTATION LOSS PER PREGNANT FEMALE

Compound: Sodium Meta-Bisulfite
 FDA No: 71-22

Week of Study	Control (10 ml/kg)	TEM (0.2 mg/kg)	71-22 (30 mg/kg)	71-22 (0.7 g/kg)	71-22 (1.2 g/kg)
<u>Acute-Single Dose</u>					
1	24/18=1.33	66/20=3.30 ^b	47/18=2.61	15/20=0.75	21/19=1.11
2	10/20=0.50	85/20=4.25 ^d	30/20=1.50 ^c	38/20=1.90 ^c	18/16=1.13
3	14/20=0.70	81/20=4.05 ^d	14/18=0.78	33/18=1.83 ^a	14/19=0.74
4	10/20=0.50	145/16=9.06 ^d	25/20=1.25 ^a	31/20=1.55 ^a	62/20=3.10 ^d
5	23/20=1.15	37/20=1.85	31/19=1.63	22/20=1.10	44/20=2.20 ^a
6	15/20=0.75	28/17=1.65 ^b	29/19=1.53	10/19=0.53	18/16=1.13
7	38/20=1.90	28/20=1.40	28/20=1.40	28/20=1.40	39/20=1.95
8	26/19=1.37	33/20=1.65	47/20=2.35 ^b	17/20=0.85	9/19=0.47 ^{AD}
<u>Subacute-Multiple Dose</u>					
1		53/18=2.94	19/14=1.36	29/18=1.61	
2		23/19=1.21 ^b	26/18=1.44 ^b	31/19=1.63 ^a	
3		25/19=1.32	35/18=1.94 ^b	33/20=1.65 ^b	
4		16/20=0.80	28/20=1.40 ^b	32/20=1.60 ^b	
5		20/20=1.00	28/17=1.65	24/20=1.20	
6		30/19=1.58 ^a	22/17=1.29	36/18=2.00 ^b	
7		28/20=1.40	29/16=1.81	24/20=1.20	

a Significant at P <0.20

b Significant at P <0.10

c Significant at P <0.05

d Significant at P <0.01

D Decreased below control

APPENDIX A

**Statistical Analysis Procedures for Dominant Lethal
Gene Tests With a Description and Explanation of the
Computer Printouts**

Statistical Analysis Procedures for Dominant Lethal Gene Tests With
A Description and Explanation of the Computer Printouts

The first stage of the analysis of the dominant lethal tests of the mutagenic studies on chemicals is the preparation of punched cards from work sheets. Each sheet contains autopsy data for the female rats that were mated, two per male, to 10 males of the same dosage group in one particular week. There are 9 dosage groups for some of the chemical additives studied, and 8 groups for the others. The 9 groups consist of 5 1-dose groups and 4 5-dose (multiple treatment) groups. The 1-dose groups are for the vehicle control, 3 additive dosage levels, and a positive control (TEM). Each rat in these groups is mated weekly for 8 weeks. The 5-dose groups are for the vehicle control and the 3 additive dosage levels. The rats in these groups are mated weekly for 7 weeks. (There is a deck of 1360 cards for each compound.)

The second stage is the execution of a computer program, KLUTE, which performs the following operations (where each statistical calculation is done once for each week's data):

1. The data cards are read and stored in central memory while a check is made to verify that the number of corpora lutea is greater than or equal to the number of implants. If any data fail this check, the run is aborted and the data are returned for review. The entire set of input data is printed out.

2. The fertility index (the number of pregnant females divided by the number of mated females) is calculated.

3. The chi-square test is done to compare each dosage level to the control on fertility. Let:

N_i = no. of mated females at dose level i,

n_i = no. of pregnant females at dose level i.

Then the chi-square 2×2 tables are of the form:

$$\begin{bmatrix} n_o & n_i \\ N_o - n_o & N_i - n_i \end{bmatrix}$$

and chi-squared (with 1 degree of freedom) is:

$$X^2_i = \frac{(N_o + N_i)(|n_o(N_i - n_i) - n_i(N_o - n_o)| - (N_o + N_i)/2)^2}{(n_o + n_i)(N_o - n_o + N_i - n_i)(N_o)(N_i)} \quad (\text{corrected for continuity})$$

where the subscript o represents the control group.*

For each dosage group (including the control group and TEM), the following is printed out: the number of pregnant females (N_{PRG}), the number of mated females (N_{MTD}), the fertility index and X^2 .

4. Armitage's test for a linear trend in proportions is applied to the fertility index. The formula for this calculation is found on pages 246-248 of "Statistical Calculations" by Snedecor and Cochran, 6th Edition, Iowa State University Press, 1967. Using the notation of (3) above, we have a 2×3 contingency table of the form:

	<u>dose 1</u>	<u>dose 2</u>	<u>dose 3</u>	<u>row totals</u>
<u>Column Totals</u>	n_1	n_2	n_3	t
	$N_1 - n_1$	$N_2 - n_2$	$N_3 - n_3$	$T-t$
	N_1	N_2	N_3	T

Armitage's "chi-square" is given as $X^2_{(C-1)} - X^2_1$, where $C=3$ and

$$X^2_1 = \frac{T(T\sum nx - t\sum Nx)^2}{t(T-t)(T\sum Nx - (\sum Nx)^2)}, \quad X^2_{(C-1)} = \frac{T^2(\sum \frac{n^2}{N} - \frac{t^2}{T})}{t(T-t)}$$

*In all tests, the single-dose treatment groups are compared with the single-dose control group and the multiple-dose treatment groups compared with the multiple-dose control group.

where Σn_x stands for $\sum_{i=1}^3 n_i x_i$, $\sum \frac{n_i^2}{N}$ for $\sum_{i=1}^3 \frac{n_i^2}{N_i}$, etc., and the x_i are the dosage levels.

This calculation is then repeated with x replaced by $\log x$. The Armitage test is also applied to the following 2×4 contingency table:

<u>Control</u>	<u>dose 1</u>	<u>dose 2</u>	<u>dose 3</u>
n_0	n_1	n_2	n_3
$N_0 - n_0$	$N_1 - n_1$	$N_2 - n_2$	$N_3 - n_3$

In this case, $C=4$.

The printout for the Armitage tests includes the degrees of freedom, the number pregnant (N PRG) and the number mated (N MTD) for each of the 3 or 4 groups included in the tests, plus χ^2 , $\chi^2_{(C-1)}$ and their difference (labeled ARMTG CHISQ).

5. The t-test is applied to determine significant differences between the average number of implantations per pregnant female at a dose level, and the average for the control. Let

n_i = no. of pregnant females at dose level i .

u_{ij} = total no. of implantations for pregnant female j of dose i .

Then,

$$\bar{u}_i = \frac{1}{n_i} \sum_{j=1}^{n_i} u_{ij}$$

$$s_i^2 = \sum_{j=1}^{n_i} (u_{ij} - \bar{u}_i)^2$$

The T-statistic for dose i has $n_o + n_i - 2$ degrees of freedom, and is equal to:

$$t_i = \frac{\bar{u}_o - \bar{u}_i}{\sqrt{\frac{s_o^2 + s_i^2}{n_o + n_i - 2} \left(\frac{1}{n_o} + \frac{1}{n_i} \right)}}$$

The t-test printout gives, for each group: the number pregnant (N PRG), the mean and standard deviation of the number of implantations. The absolute value of T and the degrees of freedom (DF) are given for each treatment group and for TEM.

6. A regression fit of the average number of implantations, \bar{u}_i , is made for both the arithmetic and logarithmic dose (X_i and $\log X_i$) to see which is better.

These two fits include the data from the three treatment groups only. A third regression using the X_i as independent variables includes data from the three treatment groups and the control group.

The regressions are computed as follows:

Let N = the number of observations, i.e., the total number of pregnant females in the groups used in the regression.

X_i = the value of the independent variable (dose or log dose) for the i -th female.

U_i = the value of the dependent variable (number of implantations) for the i -th female.

Then,

$$\bar{X} = \frac{1}{N} \sum_{i=1}^N X_i$$

SD X = standard deviation of the X_i

$$= \left[\frac{1}{N-1} SS_X \right]^{1/2},$$

$$\text{where } SS_X = \sum_{i=1}^N (X_i - \bar{X})^2$$

$$\bar{U} = \bar{U} = \frac{1}{N} \sum_{i=1}^N U_i,$$

SD U = standard deviation of the U_i

$$= \left[\frac{1}{N-1} SS_U \right]^{1/2},$$

$$\text{where } SS_U = \sum_{i=1}^N (U_i - \bar{U})^2,$$

$$\text{and } S_{XU} = \sum_{i=1}^N (X_i - \bar{X})(U_i - \bar{U}).$$

From these quantities, we compute:

\hat{B} = estimate of the slope of the regression line

$$= S_{XU}/SS_X,$$

A = estimate of the intercept of the regression line

$$= \bar{U} - \hat{B}\bar{X},$$

Also,

$$\begin{aligned} \text{VARU.X} &= \text{variance of } U \text{ about the regression line} \\ &= \frac{\text{SS}_U - (S_{XU})^2 / \text{SS}_X}{N-2} \end{aligned}$$

and from this is computed,

$$\text{VARB} = \text{variance of the estimate, B}$$

$$= \frac{\text{VARU.X}}{\text{SS}_X}$$

$$\text{VARA} = \text{variance of the estimate, A}$$

$$= \text{VARU.X} \left[\frac{1}{N} + \frac{\bar{X}^2}{\text{SS}_X} \right]$$

$$\text{VARUBAR} = \text{variance of } \bar{U},$$

$$= \frac{\text{VARU.X}}{N}$$

and

$$\text{CV U.X} = \text{coefficient of variation of } U \text{ about X}$$

$$= \frac{(\text{VARU.X})^{1/2}}{\bar{U}}$$

And finally we have:

$$\begin{aligned} \text{TB} &= \text{the t-statistic for testing the hypothesis that the regression} \\ &\quad \text{slope is zero} \end{aligned}$$

$$= \frac{B}{\sqrt{\text{VARB}}}$$

$$\begin{aligned} \text{DF} &= \text{number of degrees of freedom for TB} \\ &= N - 2 \end{aligned}$$

7. The preimplantation loss, y_{ij} , is calculated for each pregnant female, j , as the number of corpora lutea, v_{ij} , minus the number of implantations, u_{ij} . Then the Freeman-Tukey transformation is applied to y_{ij} as follows:

$$f_{ij} = \sin^{-1} \sqrt{\frac{y_{ij}}{v_{ij}+1}} + \sin^{-1} \sqrt{\frac{y_{ij}+1}{v_{ij}+1}}$$

The t-test is then applied to the f 's. Let

$$\bar{f}_i = \frac{1}{n_i} \sum_{j=1}^{n_i} f_{ij}$$

$$s_i^2 = \sum_{j=1}^{n_i} (f_{ij} - \bar{f}_i)^2,$$

where n_i , and n_o are defined above (step 3).

Then $t_i = \frac{\bar{f}_o - \bar{f}_i}{\sqrt{\left[\frac{s_o^2 + s_i^2}{n_o + n_i - 2} \left(\frac{1}{n_o} + \frac{1}{n_i} \right) \right]^{1/2}}}$

The printout gives, for each group, the number of pregnant females (N PRG), the mean and standard deviation of the f 's. For each treatment group and for TEM, the absolute value of t_i (T), and its degrees of freedom (DF) are given.

8. The number of dead implants, z_{ij} , for each female, j , is the sum of the early and late deaths. The Freeman-Tukey transformation and the subsequent t-test is applied to the dead implants for pregnant females by repeating step 7 above with z_{ij} substituted for y_{ij} .

9. The number of pregnant females with one or more dead implants, m_i , is calculated. In the printout, the m_i are referred to as N WDI (i.e., "number with dead implants").

10. The chi-square test and Armitage's test for a linear trend is calculated for the proportion of pregnant females with one or more dead implants,

$$p_i = \frac{m_i}{n_i}$$

by repeating steps 3 and 4, above, with m_i substituted for n_i , and n_i substituted for N_i .

In the printout, the ratio, p_i , is called the "death index", in analogy with the fertility index.

11. The ratios, p_i , computed above, undergo a probit analysis to determine whether the probit of this proportion is linearly related to the log dose. Computer subroutine PROBT, from the IBM System/360 Scientific Subroutine Package Version III, is used to compute A and B and the χ^2 statistic for the regression equation,

$$p_i = A + B * \log x_i$$

where p_i is derived by the program from

$$\int_{-\infty}^{p_i} N_x(0,1)dx = p_i$$

($N_x(0,1)$ is the normal curve, with a mean of 0 and a standard deviation of 1).

12. The number of dead implants, z_{ij} , and the number of total implants, u_{ij} , are calculated for each pregnant female, j. The Freeman-Tukey transformation and subsequent t-test is applied to this data by repeating step 7, above, as follows:

$$f_{ij} = \sin^{-1} \sqrt{\frac{z_{ij}}{u_{ij}+1}} + \sin^{-1} \sqrt{\frac{z_{ij}}{u_{kj}+1}}$$

$$\bar{f}_i = \frac{1}{n_i} \sum_{j=1}^{n_i} f_{ij}$$

$$s_i^2 = \sum_{j=1}^{n_i} (f_{ij} - \bar{f}_i)^2$$

$$t_i = \frac{\bar{f}_o - \bar{f}_i}{\left[\frac{s_o^2 + s_i^2}{n_o + n_i - 2} \cdot \left(\frac{1}{n_o} + \frac{1}{n_i} \right) \right]^{1/2}}$$

13. Five one-way analyses of variance are performed on the control groups' data. The five variables analyzed are:

- a. Number of pregnant females,
- b. Number of implantations per pregnant female,
- c. The pre-implantation loss (as defined in Step 7) per pregnant female,
- d. The number of dead implants per pregnant female,
- e. The ratio of dead implants to the total implants per pregnant female.

In view of the fact that none of the variables on which the one-way analysis of variance have been performed is even approximately normal in distribution, the probability levels associated with these analyses of variances are necessarily approximate.

For case a., R_{kj} equals 1 if female j assigned to male k became pregnant; otherwise R_{kj} equals zero. For cases b. through e. the tabulation is limited to data for pregnant females; i.e., R_{kj} equals the value of the specified variable for female j assigned to male k if the female was pregnant; data for non-pregnant females are excluded.

For case a., L_k equals the number of females assigned to male k. For cases b. through e., L_k equals the number of females assigned to male k that became pregnant.

For each of these variables the ANOVA calculations are as follows:

M is the number of males

$$\bar{R}_k = \frac{1}{L_k} \sum_{j=1}^{L_k} R_{kj}$$

$$\bar{R} = \frac{1}{M} \sum_{k=1}^M \bar{R}_k$$

Then, the sum-of-squares-within-males = $SUMSQ_w$

$$= \sum_{k=1}^M L_k = \sum_{j=1}^{L_k} (R_{kj} - \bar{R}_k)^2,$$

the degrees-of-freedom-within-males = DF_w

$$= \sum_{k=1}^M (L_k - 1),$$

and the mean-square-within-males = $MEANSQ_w = \frac{SUMSQ_w}{DF_w}$.

Similarly, the sum-of-squares-between-males = $SUMSQ_B = \sum_{k=1}^M L_k (\bar{R}_k - \bar{R})^2$,

the degrees-of-freedom-between-males = $DF_B = M-1$,

and the mean-square-between-males = $MEANSQ_B = \frac{SUMSQ_B}{DF_B}$.

Finally, the F-ratio is $F = \frac{MEANSQ_B}{MEANSQ_w}$.

In the printout, these quantities are labeled without the subscripts, but the "within" and "between" quantities are identified by the page heading.

Also, the total-sum-of-squares = $SUMSQ_w + SUMSQ_B$

and its degrees-of-freedom

$$\sum_{k=1}^M L_k - 1,$$

are printed.

14. The t-test is applied to determine significant differences between the average number of corpora lutea per pregnant female at a dose level, and the average for the control. Let

n_i = no. of pregnant females at dose level i.

c_{ij} = total no. of corpora lutea for pregnant female j of dose i.

Then,

$$\bar{c}_i = \frac{1}{n_i} \sum_{j=1}^{n_i} c_{ij}$$

$$s_i^2 = \sum_{j=1}^{n_i} (c_{ij} - \bar{c}_i)^2$$

The T-statistic for dose i has $n_0 + n_1 - 2$ degrees of freedom, and is equal to:

$$t_i = \frac{\bar{c}_0 - \bar{c}_i}{\sqrt{\left[\frac{s_0^2 + s_i^2}{n_0 + n_i - 2} \left(\frac{1}{n_0} + \frac{1}{n_i} \right) \right]^{1/2}}}$$

The t-test printout gives, for each group: the number pregnant (N PRG), the mean and standard deviation of the number of corpora lutea. The absolute value of T and the degrees of freedom (DF) are given for each treatment group and for TEM.

APPENDIX B

Raw Data and Statistical Analyses

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DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

SODIUM META-BISULFITE

PAGE 1

TEST MATERIAL	WEEK	S/M	DOSE	MALE	FEMALE	PREG.	IMPLANTS		EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
				NO.	NO.		L	R	L	R	L	R	L	H
CNTRL22	1	S	0.0000	1	1	Y	2	9	0	0	0	0	6	10
CNTRL22	1	S	0.0000	1	2	YY	5	1	0	1	0	0	6	6
CNTRL22	1	S	0.0000	2	3	YY	2	9	0	0	0	0	2	9
CNTRL22	1	S	0.0000	2	4	NY	-0	-0	-0	-0	-0	-0	-0	-0
CNTRL22	1	S	0.0000	3	5	YY	9	4	0	0	1	0	5	9
CNTRL22	1	SS	0.0000	3	6	YY	5	6	0	0	1	2	6	6
CNTRL22	1	S	0.0000	4	7	YY	6	5	0	0	0	0	6	5
CNTRL22	1	S	0.0000	4	8	YY	6	5	0	0	0	0	5	9
CNTRL22	1	S	0.0000	5	9	YY	5	9	0	0	0	0	3	7
CNTRL22	1	S	0.0000	5	10	YY	3	7	1	0	0	0	4	9
CNTRL22	1	S	0.0000	6	11	YY	4	7	0	0	0	0	-0	-0
CNTRL22	1	S	0.0000	6	12	NY	-0	-0	-0	-0	-0	-0	9	3
CNTRL22	1	S	0.0000	7	13	YY	9	3	0	0	0	0	7	7
CNTRL22	1	SS	0.0000	7	14	YY	6	7	0	0	0	0	9	6
CNTRL22	1	S	0.0000	8	15	YY	7	6	0	0	0	0	10	6
CNTRL22	1	S	0.0000	8	16	YY	8	6	0	0	0	0	7	6
CNTRL22	1	S	0.0000	9	17	YY	6	6	0	0	0	0	7	7
CNTRL22	1	S	0.0000	9	18	YY	4	7	0	0	0	0	1	0
CNTRL22	1	S	0.0000	10	19	YY	5	7	0	0	0	0	5	6
CNTRL22	1	S	0.0000	10	20	Y	5	7	0	0	0	0	1	0
71-22	1	S	.0300	21	41	YY	0	5	0	0	0	0	5	8
71-22	1	S	.0300	21	42	YY	6	7	0	0	0	0	11	8
71-22	1	S	.0300	22	43	YY	7	4	0	0	0	3	9	5
71-22	1	S	.0300	22	44	YY	3	1	0	0	0	0	7	7
71-22	1	SS	.0300	23	45	YY	2	1	2	0	0	0	5	8
71-22	1	S	.0300	23	46	YY	8	7	0	0	0	0	9	8
71-22	1	S	.0300	24	47	YY	8	3	0	0	0	0	8	3
71-22	1	S	.0300	24	48	YY	-0	-0	-0	-0	-0	-0	-0	-0
71-22	1	S	.0300	25	49	YY	5	8	0	1	0	0	5	8
71-22	1	S	.0300	25	50	YY	11	2	0	0	0	1	11	2
71-22	1	S	.0300	26	51	YY	1	12	0	0	0	0	1	13
71-22	1	S	.0300	26	52	YY	5	8	0	2	0	0	5	8
71-22	1	S	.0300	26	53	YY	8	7	0	0	0	0	8	8
71-22	1	S	.0300	27	53	YY	5	7	0	0	0	0	5	7
71-22	1	S	.0300	27	54	YY	-0	-0	-0	-0	-0	-0	-0	-0
71-22	1	SS	.0300	28	55	YY	5	8	0	0	0	0	5	8
71-22	1	S	.0300	28	56	YY	4	8	2	3	0	0	4	9
71-22	1	S	.0300	29	57	YY	2	10	0	0	0	0	5	7
71-22	1	S	.0300	29	58	YY	7	6	0	0	0	0	5	8
71-22	1	S	.0300	30	59	YY	8	4	0	0	0	0	7	8
71-22	1	S	.0300	30	60	Y	8	4	0	0	0	0	0	0

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

SODIUM META-BISULFITE

PAGE 2

TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS		LATE DEATHS		CORPORA LUTEA		
								L	R	L	R	L	R	
71-22	1	S	.7000	31	61	Y	5	8	0	0	0	0	5	8
71-22	1	S	.7000	31	62	YY	5	7	0	0	1	0	5	7
71-22	1	SS	.7000	32	63	YY	6	7	1	0	1	3	6	5
71-22	1	S	.7000	32	64	YY	6	5	0	0	0	0	5	7
71-22	1	S	.7000	33	65	YY	5	7	0	0	1	0	3	4
71-22	1	S	.7000	33	66	YY	4	5	0	0	0	0	4	8
71-22	1	S	.7000	34	67	YY	3	8	0	0	0	0	3	9
71-22	1	SS	.7000	34	68	YY	6	7	0	0	4	4	6	6
71-22	1	SS	.7000	35	69	YY	5	6	0	0	0	0	5	5
71-22	1	SS	.7000	35	70	YY	5	9	0	0	0	0	3	7
71-22	1	SS	.7000	36	71	YY	3	7	1	0	1	0	6	7
71-22	1	SS	.7000	36	72	YY	6	5	0	0	0	0	7	5
71-22	1	SS	.7000	37	73	YY	5	9	0	0	0	0	7	9
71-22	1	SS	.7000	37	74	YY	7	5	0	0	0	0	7	7
71-22	1	SS	.7000	38	75	YY	5	7	2	0	0	0	5	6
71-22	1	SS	.7000	38	76	YY	5	6	0	0	0	0	5	8
71-22	1	SS	.7000	39	77	YY	5	6	0	0	0	0	3	4
71-22	1	SS	.7000	39	78	YY	3	8	0	0	0	0	5	4
71-22	1	S	.7000	40	79	YY	4	6	0	0	0	0	8	8
71-22	1	S	.7000	40	80	Y	3	3	0	0	0	0	0	0
71-22	1	S	1.2000	41	81	Y	6	6	0	0	0	0	6	7
71-22	1	SS	1.2000	41	82	YY	5	5	0	1	0	0	6	6
71-22	1	SS	1.2000	42	83	YY	6	6	0	0	0	0	6	6
71-22	1	SS	1.2000	42	84	YY	6	4	0	0	0	0	5	7
71-22	1	SS	1.2000	43	85	YY	5	5	0	0	0	0	5	8
71-22	1	SS	1.2000	43	86	YY	5	7	0	0	0	0	5	8
71-22	1	SS	1.2000	44	87	YY	4	8	0	0	0	0	-0	-0
71-22	1	SS	1.2000	44	88	NY	0	0	-0	-0	-0	-0	-0	-0
71-22	1	SS	1.2000	45	89	YY	7	8	0	0	0	0	7	8
71-22	1	SS	1.2000	45	90	YY	4	9	0	0	0	0	4	9
71-22	1	SS	1.2000	46	91	YY	7	4	0	0	0	0	9	5
71-22	1	SS	1.2000	46	92	YY	7	5	0	0	0	0	7	7
71-22	1	SS	1.2000	46	92	YY	7	5	0	0	0	0	4	9
71-22	1	SS	1.2000	47	93	YY	3	9	1	0	0	0	4	9
71-22	1	SS	1.2000	47	94	YY	4	8	0	0	0	0	4	8
71-22	1	SS	1.2000	48	95	YY	6	6	0	0	0	0	6	6
71-22	1	SS	1.2000	48	96	YY	5	5	0	2	0	0	6	7
71-22	1	SS	1.2000	49	97	YY	7	7	0	0	0	0	6	8
71-22	1	SS	1.2000	49	98	YY	7	7	0	0	0	0	5	8
71-22	1	S	1.2000	50	99	YY	7	8	0	0	0	0	0	0
71-22	1	S	1.2000	50	100	YY	7	8	0	0	0	0	0	1

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS		EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
							L	R	L	R	L	R	L	R
TEM22	1	S	.0002	11	21	Y	4	2	1	2	0	0	4	7
TEM22	1	S	.0002	11	22	YY	7	7	1	6	3	2	7	7
TEM22	1	S	.0002	12	23	YY	6	6	1	2	0	1	6	6
TEM22	1	S	.0002	12	24	YY	8	3	2	0	1	1	10	11
TEM22	1	S	.0002	13	25	YY	6	6	0	0	0	3	3	9
TEM22	1	S	.0002	13	26	YY	3	5	1	2	0	0	5	6
TEM22	1	S	.0002	14	27	YY	3	5	0	0	0	0	5	9
TEM22	1	S	.0002	14	28	YY	5	9	0	0	0	0	5	6
TEM22	1	S	.0002	15	29	YY	0	5	0	0	1	1	9	10
TEM22	1	S	.0002	15	30	YY	4	6	1	2	0	0	8	6
TEM22	1	S	.0002	16	31	YY	8	6	2	3	0	0	9	6
TEM22	1	S	.0002	16	32	YY	7	4	2	3	0	0	7	8
TEM22	1	S	.0002	17	33	YY	7	8	0	0	0	0	7	5
TEM22	1	S	.0002	17	34	YY	4	7	1	0	0	0	7	5
TEM22	1	S	.0002	18	35	YY	5	5	0	0	3	2	3	10
TEM22	1	S	.0002	18	36	YY	2	0	1	0	0	0	8	4
TEM22	1	S	.0002	19	37	YY	2	1	0	0	0	0	6	5
TEM22	1	S	.0002	19	38	YY	2	1	0	0	0	0	5	6
TEM22	1	S	.0002	20	39	YY	5	6	0	0	3	3	5	7
TEM22	1	S	.0002	20	40	YY	4	4	0	0	4	3	5	7
CNTRL22	1	M	0.0000	1	1	Y	2	9	0	0	0	0	6	10
CNTRL22	1	M	0.0000	1	2	YY	5	2	1	0	0	0	6	6
CNTRL22	1	M	0.0000	2	3	YY	2	0	0	0	0	0	2	9
CNTRL22	1	M	0.0000	2	4	YY	-0	0	-0	-0	-0	-0	-0	-0
CNTRL22	1	M	0.0000	3	5	YY	9	4	0	0	1	0	9	4
CNTRL22	1	M	0.0000	3	6	YY	5	7	0	0	0	0	5	8
CNTRL22	1	M	0.0000	4	7	YY	6	7	0	0	1	2	6	8
CNTRL22	1	M	0.0000	4	8	YY	6	5	0	0	0	0	6	5
CNTRL22	1	M	0.0000	5	9	YY	5	9	0	0	0	0	3	7
CNTRL22	1	M	0.0000	5	10	YY	3	7	1	0	0	0	3	9
CNTRL22	1	M	0.0000	6	11	YY	4	7	0	0	0	0	-0	-0
CNTRL22	1	M	0.0000	6	12	YY	-0	-0	-0	-0	-0	-0	9	3
CNTRL22	1	M	0.0000	7	13	YY	9	3	0	0	0	0	7	7
CNTRL22	1	M	0.0000	7	14	YY	6	7	0	0	0	0	9	6
CNTRL22	1	M	0.0000	8	15	YY	7	6	0	0	0	0	10	6
CNTRL22	1	M	0.0000	8	16	YY	8	6	0	0	0	0	7	6
CNTRL22	1	M	0.0000	9	17	YY	6	6	0	0	0	0	4	7
CNTRL22	1	M	0.0000	9	18	YY	4	7	0	0	0	0	5	9
CNTRL22	1	M	0.0000	10	19	YY	5	7	0	0	0	0	6	7
CNTRL22	1	M	0.0000	10	20	YY	5	7	0	0	0	0	1	1

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TEST MATERIAL	WEEK	S/M	DOSE	MALE	FEMALE	PREG.	IMPLANTS	EARLY DEATHS		LATE DEATHS		CORPORA LUTEA		
				NO.	NO.			L	R	L	R	L	R	
71-22	1	M	1.2000	31	61	Y	7	5	0	0	0	0	7	5
71-22	1	M	1.2000	31	62	YY	6	5	0	0	0	0	6	5
71-22	1	M	1.2000	32	63	YY	8	3	0	0	0	0	8	3
71-22	1	M	1.2000	32	64	YY	4	9	0	0	0	0	4	9
71-22	1	M	1.2000	33	65	YY	9	6	0	0	2	2	8	8
71-22	1	M	1.2000	33	66	N	-0	-0	-0	-0	-0	-0	-0	-0
71-22	1	M	1.2000	34	67	YY	7	6	0	0	0	0	8	6
71-22	1	M	1.2000	34	68	YY	6	7	0	0	0	0	7	7
71-22	1	M	1.2000	35	69	YY	5	6	0	0	1	0	5	7
71-22	1	M	1.2000	35	70	YY	5	9	1	0	0	0	6	12
71-22	1	M	1.2000	36	71	YY	4	11	0	0	0	0	4	12
71-22	1	M	1.2000	36	72	YN	-0	-0	-0	-0	-0	-0	-0	-0
71-22	1	M	1.2000	37	73	YY	4	7	0	0	0	0	5	9
71-22	1	M	1.2000	37	74	YY	8	8	0	0	0	0	8	12
71-22	1	M	1.2000	38	75	YY	3	2	1	0	0	0	9	5
71-22	1	M	1.2000	38	76	YY	10	6	0	1	0	0	10	6
71-22	1	M	1.2000	39	77	YY	3	8	0	0	1	0	3	9
71-22	1	M	1.2000	39	78	YY	5	6	0	0	0	0	5	7
71-22	1	M	1.2000	40	79	YY	6	5	1	0	0	0	7	5
71-22	1	M	1.2000	40	80	YY	7	6	0	0	0	0	7	6

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	EARLY				LATE				CORPORA LUTEA	
							IMPLANTS L	IMPLANTS R	DEATHS L	DEATHS R	DEATHS L	DEATHS R	L	R	L	R
CNTRL22	2	S	0.0000	1	1	Y	6	8	0	0	0	0	6	8		
CNTRL22	2	S	0.0000	1	2	Y	9	4	0	0	0	0	9	4		
CNTRL22	2	S	0.0000	2	3	Y	9	3	0	0	0	0	9	3		
CNTRL22	2	S	0.0000	2	4	YY	7	5	0	0	1	1	5	6		
CNTRL22	2	S	0.0000	3	5	YY	5	6	0	0	0	0	7	6		
CNTRL22	2	S	0.0000	3	6	YY	6	6	0	0	0	0	6	5		
CNTRL22	2	S	0.0000	4	7	YY	6	5	0	0	1	0	5	8		
CNTRL22	2	S	0.0000	4	8	YY	5	8	0	0	0	0	5	8		
CNTRL22	2	S	0.0000	5	9	YY	5	8	0	0	0	0	9	2		
CNTRL22	2	S	0.0000	5	10	YY	8	0	0	0	0	1	13	3		
CNTRL22	2	S	0.0000	6	11	YY	11	3	0	0	0	0	6	8		
CNTRL22	2	S	0.0000	6	12	YY	6	8	0	0	2	3	5	10		
CNTRL22	2	S	0.0000	7	13	YY	5	10	0	0	0	0	4	10		
CNTRL22	2	S	0.0000	7	14	YY	4	10	0	0	1	0	3	9		
CNTRL22	2	S	0.0000	8	15	YY	2	9	0	0	0	0	5	7		
CNTRL22	2	S	0.0000	8	16	YY	5	7	0	0	2	3	3	6		
CNTRL22	2	S	0.0000	9	17	YY	2	6	0	2	0	0	7	6		
CNTRL22	2	S	0.0000	9	18	YY	7	6	0	0	0	0	8	8		
CNTRL22	2	S	0.0000	10	19	YY	8	6	2	0	0	0	7	8		
CNTRL22	2	S	0.0000	10	20	YY	6	8	0	0	0	0	6	8		
71-22	2	S	.0300	21	41	Y	0	6	0	0	0	0	5	7		
71-22	2	S	.0300	21	42	YY	4	10	0	0	0	0	4	11		
71-22	2	S	.0300	22	43	YY	4	7	0	0	0	0	6	8		
71-22	2	S	.0300	22	44	YY	7	6	1	0	0	0	7	7		
71-22	2	S	.0300	23	45	YY	4	10	0	0	0	1	4	10		
71-22	2	S	.0300	23	46	YY	5	8	0	0	0	0	5	9		
71-22	2	S	.0300	24	47	YY	3	10	0	0	0	0	3	11		
71-22	2	S	.0300	24	48	YY	6	7	0	0	0	1	7	8		
71-22	2	S	.0300	25	49	YY	9	3	0	0	0	0	9	7		
71-22	2	S	.0300	25	50	YY	6	7	0	1	0	0	6	7		
71-22	2	S	.0300	26	51	YY	5	9	0	0	0	0	6	8		
71-22	2	S	.0300	26	52	YY	6	8	0	1	0	0	9	8		
71-22	2	S	.0300	27	53	YY	7	8	0	0	0	0	1	10		
71-22	2	S	.0300	27	54	YY	1	8	0	0	0	0	6	6		
71-22	2	S	.0300	28	55	YY	6	6	0	0	0	0	4	7		
71-22	2	S	.0300	28	56	YY	4	7	0	0	0	0	8	5		
71-22	2	S	.0300	29	57	YY	7	3	0	0	0	0	6	5		
71-22	2	S	.0300	29	58	YY	5	5	0	0	0	0	6	1		
71-22	2	S	.0300	30	59	YY	8	1	0	0	0	0	7	8		
71-22	2	S	.0300	30	60	YY	3	8	0	0	0	0	3	8		

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS		LATE DEATHS		CORPORA LUTEA		
								L	R	L	R	L	R	
71-22	2	S	.7000	31	61	Y	4	9	0	0	0	0	4	9
71-22	2	S	.7000	31	62	Y	5	8	0	0	0	0	8	8
71-22	2	S	.7000	32	63	Y	3	9	0	0	0	0	3	9
71-22	2	S	.7000	32	64	Y	5	5	0	0	0	0	5	8
71-22	2	S	.7000	33	65	YY	0	4	0	0	0	0	2	7
71-22	2	S	.7000	33	66	YY	6	5	0	0	0	0	6	6
71-22	2	S	.7000	34	67	YY	7	7	2	1	1	0	7	7
71-22	2	S	.7000	34	68	YY	9	5	1	0	0	0	9	5
71-22	2	S	.7000	35	69	YY	1	0	0	0	0	0	5	5
71-22	2	S	.7000	35	70	YY	7	3	0	0	0	0	7	6
71-22	2	S	.7000	36	71	YY	0	7	0	0	0	0	6	7
71-22	2	S	.7000	36	72	YY	8	7	0	0	0	0	9	7
71-22	2	S	.7000	37	73	YY	6	7	0	0	0	0	6	7
71-22	2	S	.7000	37	74	YY	9	3	1	0	0	0	9	4
71-22	2	S	.7000	38	75	YY	5	6	1	0	0	0	5	7
71-22	2	S	.7000	38	76	YY	4	5	0	0	1	1	4	8
71-22	2	S	.7000	39	77	YY	5	6	0	0	0	0	5	7
71-22	2	S	.7000	39	78	YY	9	3	2	0	0	0	9	4
71-22	2	S	.7000	40	79	YY	4	8	0	0	0	0	4	8
71-22	2	S	.7000	40	80	Y	6	7	0	0	0	0	6	7
71-22	2	S	1.2000	41	81	Y	7	6	0	0	2	0	7	6
71-22	2	S	1.2000	41	82	YY	8	6	0	0	3	0	8	6
71-22	2	S	1.2000	42	83	NN	-0	-0	-0	-0	-0	-0	-0	-0
71-22	2	S	1.2000	42	84	NN	-0	-0	-0	-0	-0	-0	-0	-0
71-22	2	S	1.2000	43	85	YY	6	9	0	0	0	1	7	9
71-22	2	S	1.2000	43	86	YY	5	7	0	0	0	0	7	7
71-22	2	S	1.2000	44	87	NN	-0	-0	-0	-0	-0	-0	-0	-0
71-22	2	S	1.2000	44	88	NN	-0	-0	-0	-0	-0	-0	-0	-0
71-22	2	S	1.2000	45	89	YY	9	6	0	0	1	0	9	6
71-22	2	S	1.2000	45	90	YY	7	7	1	0	0	0	7	7
71-22	2	S	1.2000	46	91	YY	3	8	0	1	0	0	3	9
71-22	2	S	1.2000	46	92	YY	3	5	0	1	1	1	4	5
71-22	2	S	1.2000	47	93	YY	10	5	0	0	2	1	10	5
71-22	2	S	1.2000	47	94	YY	7	6	0	0	1	0	7	6
71-22	2	S	1.2000	48	95	YY	7	4	0	0	0	2	8	4
71-22	2	S	1.2000	48	96	YY	4	8	0	0	0	0	4	8
71-22	2	S	1.2000	49	97	YY	3	7	0	0	0	0	6	5
71-22	2	S	1.2000	49	98	YY	1	0	0	0	0	0	2	9
71-22	2	S	1.2000	50	99	YY	2	9	0	0	0	0	2	5
71-22	2	S	1.2000	50	100	Y	6	5	0	0	0	1	6	5

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS				EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
							L	R	L	R	L	R	L	R	L	R
TEM22	2	S	.0002	11	21	Y	1	5	0	0	1	5	7	7		
TEM22	2	S	.0002	11	22	YY	3	7	3	6	0	0	3	7		
TEM22	2	S	.0002	12	23	YY	3	4	2	3	0	0	6	6		
TEM22	2	S	.0002	12	24	YY	4	4	4	1	0	0	7	6		
TEM22	2	S	.0002	13	25	YY	4	8	4	8	0	0	4	8		
TEM22	2	S	.0002	13	26	YY	1	6	1	6	0	0	1	10		
TEM22	2	S	.0002	14	27	YY	1	2	0	0	1	1	12	4		
TEM22	2	S	.0002	14	28	YY	3	6	1	4	1	1	5	7		
TEM22	2	S	.0002	15	29	YY	1	6	0	0	0	0	6	6		
TEM22	2	S	.0002	15	30	YY	6	6	6	6	0	0	6	6		
TEM22	2	S	.0002	16	31	YY	5	5	5	5	4	0	0	5	5	
TEM22	2	S	.0002	16	32	YY	5	5	5	5	2	2	0	0	5	
TEM22	2	S	.0002	17	33	YY	3	7	2	8	4	4	7	7		
TEM22	2	S	.0002	17	34	YY	0	4	0	0	7	0	6	6		
TEM22	2	S	.0002	18	35	YY	2	7	2	4	0	0	6	7		
TEM22	2	S	.0002	18	36	YY	5	5	4	3	0	0	5	4		
TEM22	2	S	.0002	19	37	YY	1	0	0	0	1	0	4	5		
TEM22	2	S	.0002	19	38	YY	4	4	4	4	0	0	6	7		
TEM22	2	S	.0002	20	39	YY	4	4	4	4	0	0	7	7		
TEM22	2	S	.0002	20	40	YY	4	4	4	4	0	0	0	0		
CNTRL22	2	M	0.0000	1	1	Y	6	8	0	0	0	0	6	8		
CNTRL22	2	M	0.0000	1	2	YY	9	4	0	0	0	0	9	4		
CNTRL22	2	M	0.0000	2	3	YY	9	3	0	0	1	1	9	3		
CNTRL22	2	M	0.0000	2	4	YY	7	5	0	0	0	0	5	6		
CNTRL22	2	M	0.0000	3	5	YY	5	6	0	0	0	0	7	6		
CNTRL22	2	M	0.0000	3	6	YY	6	6	0	0	0	0	5	6		
CNTRL22	2	M	0.0000	4	7	YY	6	5	0	0	0	0	6	5		
CNTRL22	2	M	0.0000	4	8	YY	5	8	0	0	0	0	5	8		
CNTRL22	2	M	0.0000	5	9	YY	5	8	0	0	0	0	5	8		
CNTRL22	2	M	0.0000	5	10	YY	8	0	0	0	0	0	9	2		
CNTRL22	2	M	0.0000	6	11	YY	11	3	0	0	0	0	13	3		
CNTRL22	2	M	0.0000	6	12	YY	6	8	0	0	0	0	6	8		
CNTRL22	2	M	0.0000	7	13	YY	5	10	0	0	0	0	5	10		
CNTRL22	2	M	0.0000	7	14	YY	4	10	0	0	1	0	4	10		
CNTRL22	2	M	0.0000	8	15	YY	2	9	0	0	0	0	3	9		
CNTRL22	2	M	0.0000	8	16	YY	5	7	0	0	2	0	3	7		
CNTRL22	2	M	0.0000	9	17	YY	7	6	0	0	0	0	7	6		
CNTRL22	2	M	0.0000	9	18	YY	7	6	0	0	0	0	8	8		
CNTRL22	2	M	0.0000	10	19	YY	8	8	0	0	0	0	8	8		
CNTRL22	2	M	0.0000	10	20	Y	6	8	0	0	0	0	6	8		

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS		LATE DEATHS		CORPORA LUTEA		
								L	R	L	R	L	R	
CNTRL22	3	S	0.0000	1	1	Y	6	7	0	0	0	0	6	7
CNTRL22	3	S	0.0000	1	2	Y	9	5	0	0	0	0	9	3
CNTRL22	3	S	0.0000	2	3	YY	7	5	0	0	0	0	7	5
CNTRL22	3	S	0.0000	2	4	YY	9	4	0	0	0	0	9	4
CNTRL22	3	S	0.0000	3	5	YY	4	12	0	0	1	0	4	12
CNTRL22	3	S	0.0000	3	6	YY	4	8	0	0	0	0	4	8
CNTRL22	3	S	0.0000	4	7	YY	8	7	0	0	3	0	8	7
CNTRL22	3	S	0.0000	4	8	YY	6	5	0	0	0	0	6	5
CNTRL22	3	S	0.0000	5	9	YY	4	6	0	0	0	2	4	6
CNTRL22	3	S	0.0000	5	10	YY	3	9	0	0	0	0	5	9
CNTRL22	3	S	0.0000	6	11	YY	5	9	0	0	0	4	5	9
CNTRL22	3	S	0.0000	6	12	YY	5	7	0	0	1	2	5	8
CNTRL22	3	S	0.0000	7	13	YY	2	8	0	0	0	0	2	8
CNTRL22	3	S	0.0000	7	14	YY	6	4	0	0	0	0	6	4
CNTRL22	3	S	0.0000	8	15	YY	6	4	0	0	0	0	7	4
CNTRL22	3	S	0.0000	8	16	YY	6	4	3	2	1	1	7	4
CNTRL22	3	S	0.0000	9	17	YY	3	9	0	0	1	0	3	11
CNTRL22	3	S	0.0000	9	18	YY	9	4	0	0	0	0	10	4
CNTRL22	3	S	0.0000	10	19	YY	6	5	0	0	1	0	9	6
CNTRL22	3	S	0.0000	10	20	Y	8	3	0	0	0	0	8	5
71-22	3	S	.0300	21	41	Y	9	5	0	0	0	0	9	5
71-22	3	S	.0300	21	42	YY	10	3	0	0	0	0	10	3
71-22	3	S	.0300	22	43	YY	10	6	0	0	1	0	10	6
71-22	3	S	.0300	22	44	N	-0	-0	-0	-0	-0	-0	-0	-0
71-22	3	S	.0300	23	45	YY	3	8	0	0	0	0	4	8
71-22	3	S	.0300	23	46	YY	7	3	0	0	1	0	7	4
71-22	3	S	.0300	24	47	YY	7	7	0	0	0	0	7	7
71-22	3	S	.0300	24	48	YY	8	5	0	0	0	0	8	6
71-22	3	S	.0300	25	49	YY	7	6	0	0	2	3	7	6
71-22	3	S	.0300	25	50	YY	3	13	0	1	0	0	3	13
71-22	3	S	.0300	26	51	YY	5	8	0	0	0	0	5	9
71-22	3	S	.0300	26	52	YY	5	6	0	0	0	0	5	6
71-22	3	S	.0300	27	53	YY	7	8	0	0	0	0	7	9
71-22	3	S	.0300	27	54	YY	5	6	0	0	0	0	5	7
71-22	3	S	.0300	28	55	YY	7	7	0	2	0	0	7	9
71-22	3	S	.0300	28	56	YY	-0	-0	-0	-0	-0	-0	-0	-0
71-22	3	S	.0300	29	57	YY	5	7	0	0	0	0	5	8
71-22	3	S	.0300	29	58	YY	3	9	0	0	0	0	3	9
71-22	3	S	.0300	30	59	YY	8	5	0	0	0	1	8	8
71-22	3	S	.0300	30	60	Y	8	5	0	0	0	0	8	5

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS		LATE DEATHS		CORPORA LUTEA		
								L	R	L	R	L	R	
71-22	3	S	.7000	31	61	Y	3	0	1	0	0	0	8	3
71-22	3	S	.7000	31	62	YY	7	5	0	1	0	0	7	5
71-22	3	S	.7000	32	63	YY	1	4	0	0	0	0	4	8
71-22	3	S	.7000	32	64	YY	5	6	0	0	0	0	5	7
71-22	3	S	.7000	33	65	YY	2	9	0	0	0	0	3	9
71-22	3	S	.7000	33	66	YY	8	5	0	0	0	0	9	5
71-22	3	S	.7000	34	67	YY	7	4	0	0	1	0	9	4
71-22	3	S	.7000	34	68	YY	6	5	0	0	0	0	8	8
71-22	3	S	.7000	35	69	YY	8	5	0	0	0	0	8	5
71-22	3	S	.7000	35	70	YY	6	8	0	0	0	0	8	6
71-22	3	S	.7000	36	71	YY	1	11	0	0	0	1	1	11
71-22	3	S	.7000	36	72	YY	7	5	0	0	1	0	7	5
71-22	3	S	.7000	37	73	YY	2	11	0	0	0	1	2	11
71-22	3	S	.7000	37	74	NY	-0	-0	-0	-0	-0	-0	-0	-0
71-22	3	S	.7000	38	75	YY	8	8	0	2	0	1	8	8
71-22	3	S	.7000	38	76	YY	8	4	0	0	1	0	8	6
71-22	3	S	.7000	39	77	YY	3	7	0	0	1	0	3	7
71-22	3	S	.7000	39	78	YY	5	2	0	0	0	0	8	5
71-22	3	S	.7000	40	79	YY	8	5	0	0	0	0	8	5
71-22	3	S	.7000	40	80	N	-0	-0	-0	-0	-0	-0	-0	-0
71-22	3	S	1.2000	41	81	Y	4	8	2	3	0	0	4	8
71-22	3	S	1.2000	41	82	YY	5	5	0	0	2	2	6	7
71-22	3	S	1.2000	42	83	YY	4	8	0	0	0	0	5	8
71-22	3	S	1.2000	42	84	YY	3	9	0	0	0	0	3	9
71-22	3	S	1.2000	43	85	YY	8	7	0	0	0	0	8	7
71-22	3	S	1.2000	43	86	YY	4	8	0	0	1	0	4	8
71-22	3	S	1.2000	44	87	YY	7	5	0	0	0	0	7	6
71-22	3	S	1.2000	44	88	NY	-0	-0	-0	-0	-0	-0	-0	-0
71-22	3	S	1.2000	45	89	YY	7	5	0	1	4	2	7	5
71-22	3	S	1.2000	45	90	YY	4	5	1	1	0	0	4	5
71-22	3	S	1.2000	46	91	YY	8	6	2	0	0	0	8	6
71-22	3	S	1.2000	46	92	YY	6	6	0	1	0	0	6	6
71-22	3	S	1.2000	47	93	YY	6	5	1	0	0	2	7	6
71-22	3	S	1.2000	47	94	YY	5	6	0	1	0	1	6	6
71-22	3	S	1.2000	48	95	YY	6	3	0	0	0	0	7	6
71-22	3	S	1.2000	48	96	YY	5	5	0	0	0	0	6	5
71-22	3	S	1.2000	49	97	YY	8	7	0	0	0	2	8	7
71-22	3	S	1.2000	49	98	YY	3	8	0	0	0	0	3	8
71-22	3	S	1.2000	50	99	YY	6	7	0	0	0	0	6	7
71-22	3	S	1.2000	50	100	Y	7	5	3	1	0	0	8	5

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS		LATE DEATHS		CORPORAL LUTEA	
								L	R	L	R	L	R
TEM22	3	S	.0002	11	21	Y	1	2	0	2	0	0	2
TFM22	3	S	.0002	11	22	YY	6	3	5	3	0	0	7
TEM22	3	S	.0002	12	23	YY	5	4	2	2	0	0	5
TEM22	3	S	.0002	12	24	YY	6	5	5	5	0	0	5
TEM22	3	S	.0002	13	25	YY	2	4	10	1	7	1	11
TEM22	3	S	.0002	13	26	YY	4	7	0	0	4	6	6
TFM22	3	S	.0002	14	27	YY	0	5	0	5	0	0	7
TEM22	3	S	.0002	14	28	YY	6	5	0	0	0	0	12
TEM22	3	S	.0002	15	29	YY	6	5	0	0	0	0	5
TEM22	3	S	.0002	15	30	YY	8	4	7	3	0	2	6
TEM22	3	S	.0002	16	31	YY	3	4	0	5	2	0	7
TEM22	3	S	.0002	16	32	YY	6	3	5	5	0	0	4
TFM22	3	S	.0002	17	33	YY	7	2	2	2	1	0	9
TEM22	3	S	.0002	17	34	YY	5	5	5	4	0	0	8
TEM22	3	SS	.0002	18	35	YY	1	5	0	4	0	0	6
TEM22	3	SS	.0002	18	36	YY	5	5	0	5	0	0	7
TFM22	3	SS	.0002	19	37	YY	6	4	0	0	0	0	6
TEM22	3	SS	.0002	19	38	YY	2	2	0	0	2	2	5
TEM22	3	SS	.0002	20	39	YY	6	3	0	0	5	3	6
TEM22	3	S	.0002	20	40	Y	2	1	0	2	1	0	6
CNTRL22	3	M	0.0000	1	1	Y	6	7	0	0	0	0	6
CNTRL22	3	M	0.0000	1	2	YY	9	3	0	0	0	0	9
CNTRL22	3	M	0.0000	2	3	YY	7	5	0	0	0	0	5
CNTRL22	3	M	0.0000	2	4	YY	9	4	0	0	0	0	4
CNTRL22	3	M	0.0000	3	5	YY	4	4	0	0	1	0	4
CNTRL22	3	M	0.0000	3	6	YY	4	4	0	0	0	0	4
CNTRL22	3	M	0.0000	4	7	YY	8	7	0	0	0	0	8
CNTRL22	3	M	0.0000	4	8	YY	6	5	0	0	0	0	6
CNTRL22	3	M	0.0000	5	9	YY	4	6	0	0	0	0	4
CNTRL22	3	M	0.0000	5	10	YY	3	9	0	0	0	0	5
CNTRL22	3	M	0.0000	6	11	YY	5	9	0	0	0	0	5
CNTRL22	3	M	0.0000	6	12	YY	5	7	0	0	0	1	2
CNTRL22	3	M	0.0000	7	13	YY	2	8	0	0	0	0	2
CNTRL22	3	M	0.0000	7	14	YY	6	4	0	0	0	0	6
CNTRL22	3	M	0.0000	8	15	YY	6	4	0	0	0	0	4
CNTRL22	3	M	0.0000	8	16	YY	6	4	0	0	0	0	4
CNTRL22	3	M	0.0000	9	17	YY	3	9	0	0	0	0	3
CNTRL22	3	M	0.0000	9	18	YY	6	5	0	0	0	0	1
CNTRL22	3	M	0.0000	10	19	YY	6	8	0	0	0	0	1
CNTRL22	3	M	0.0000	10	20	Y	3	0	0	0	0	0	0

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TEST MATERIAL	#WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS				EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
							L	R	L	R	L	R	L	R	L	R
71-22	3	M	.0300	11	21	Y	4	7	0	0	0	0	0	0	5	9
71-22	3	M	.0300	11	22	YY	8	5	0	0	2	2	3	0	10	6
71-22	3	M	.0300	12	23	YY	6	8	0	0	2	2	0	0	6	9
71-22	3	M	.0300	12	24	YY	8	6	1	0	0	0	0	0	8	6
71-22	3	M	.0300	13	25	YY	1	0	0	0	0	0	0	0	7	7
71-22	3	M	.0300	13	26	YY	5	6	0	0	0	0	0	0	6	6
71-22	3	M	.0300	14	27	YY	4	6	0	0	1	0	0	0	4	7
71-22	3	M	.0300	14	28	YY	4	8	0	0	0	0	0	0	4	8
71-22	3	M	.0300	15	29	YY	7	4	0	0	0	0	0	0	7	4
71-22	3	M	.0300	15	30	YY	4	5	0	0	0	0	0	0	4	5
71-22	3	M	.0300	16	31	YY	3	9	0	0	0	0	0	0	3	9
71-22	3	M	.0300	16	32	YY	4	6	0	0	1	1	1	1	4	7
71-22	3	M	.0300	17	33	YY	6	9	0	0	0	0	0	0	6	5
71-22	3	M	.0300	17	34	YY	6	7	0	0	0	0	0	0	7	5
71-22	3	M	.0300	18	35	YY	7	0	0	0	0	0	0	0	-0	0
71-22	3	M	.0300	18	35	N	-0	0	0	0	0	0	0	0	8	3
71-22	3	M	.0300	19	37	YY	8	3	2	2	2	2	0	0	5	7
71-22	3	M	.0300	19	38	YY	5	4	0	0	3	0	2	0	6	5
71-22	3	M	.0300	20	39	YY	6	8	0	0	1	0	0	0	6	6
71-22	3	M	.0300	20	40	YY	2	8	0	0	0	0	0	0	2	8
71-22	3	M	.7000	21	41	Y	7	4	0	0	1	0	0	0	8	4
71-22	3	M	.7000	21	42	YY	3	7	0	0	0	0	0	0	3	9
71-22	3	M	.7000	22	43	YY	1	1	0	0	1	0	0	0	6	6
71-22	3	M	.7000	22	44	N	-0	0	0	0	0	0	0	0	-0	-0
71-22	3	M	.7000	23	45	YY	5	8	0	0	0	0	0	0	6	8
71-22	3	M	.7000	23	46	YY	6	5	0	0	0	0	0	0	6	5
71-22	3	M	.7000	24	47	YY	1	11	0	0	0	0	0	0	1	13
71-22	3	M	.7000	24	48	YY	6	5	0	0	0	0	0	0	6	5
71-22	3	M	.7000	25	49	YY	6	8	0	0	0	0	0	0	6	8
71-22	3	M	.7000	25	50	YY	5	3	2	2	0	0	0	0	5	7
71-22	3	M	.7000	26	51	YY	5	7	1	1	2	0	0	0	5	8
71-22	3	M	.7000	26	52	YY	6	6	0	0	0	0	0	0	6	7
71-22	3	M	.7000	27	53	YY	6	7	0	0	0	0	1	0	7	9
71-22	3	M	.7000	27	54	YY	6	5	0	0	0	0	0	0	7	7
71-22	3	M	.7000	28	55	YY	7	5	2	0	0	0	0	0	7	7
71-22	3	M	.7000	28	56	YY	9	6	0	0	0	0	0	0	9	6
71-22	3	M	.7000	29	57	YY	8	3	0	0	0	0	0	0	8	3
71-22	3	M	.7000	29	58	YY	4	7	0	0	0	0	0	0	4	7
71-22	3	M	.7000	30	59	YY	1	0	0	0	0	0	0	0	1	7
71-22	3	M	.7000	30	60	N	-0	-0	-0	-0	0	0	0	-0	-0	-0

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS		EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
							L	R	L	R	L	R	L	R
71-22	3	M	1.2000	31	61	Y	7	4	0	0	0	0	7	4
71-22	3	M	1.2000	31	62	YY	3	3	0	0	0	0	4	8
71-22	3	M	1.2000	32	63	YY	2	5	0	0	0	0	5	8
71-22	3	M	1.2000	32	64	YY	8	5	1	0	0	0	8	5
71-22	3	M	1.2000	33	65	YY	5	7	0	0	0	0	5	7
71-22	3	M	1.2000	33	66	YY	6	4	0	0	0	0	6	4
71-22	3	M	1.2000	34	67	YY	6	7	1	0	0	0	8	10
71-22	3	M	1.2000	34	68	YY	7	5	0	0	2	3	8	5
71-22	3	M	1.2000	35	69	YY	5	7	0	0	0	0	5	8
71-22	3	M	1.2000	35	70	YY	3	4	0	1	0	0	7	4
71-22	3	M	1.2000	36	71	YY	7	6	0	0	1	0	7	6
71-22	3	M	1.2000	36	72	YY	5	7	1	0	0	1	5	8
71-22	3	M	1.2000	37	73	YY	7	3	0	0	0	0	8	4
71-22	3	M	1.2000	37	74	YY	3	8	0	0	0	0	4	7
71-22	3	M	1.2000	38	75	YY	3	6	0	0	0	0	8	8
71-22	3	M	1.2000	38	76	YY	6	8	0	0	0	2	3	11
71-22	3	M	1.2000	39	77	YY	2	10	0	0	0	0	6	6
71-22	3	M	1.2000	39	78	YY	6	6	0	0	0	0	6	6
71-22	3	M	1.2000	40	79	YY	8	7	0	0	0	0	9	7
71-22	3	M	1.2000	40	80	Y	6	7	0	0	0	0	6	7

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS		EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
							L	R	L	R	L	R	L	R
CNTRL22	4	S	0.0000	1	1	Y	9	5	0	0	0	0	9	5
CNTRL22	4	S	0.0000	1	2	YY	8	8	0	0	1	0	9	8
CNTRL22	4	S	0.0000	2	3	YY	7	6	1	0	0	1	7	6
CNTRL22	4	S	0.0000	2	4	YY	11	6	0	0	0	0	11	6
CNTRL22	4	S	0.0000	3	5	YY	4	3	0	0	0	0	8	3
CNTRL22	4	S	0.0000	3	6	YY	8	4	0	0	0	0	8	5
CNTRL22	4	S	0.0000	4	7	YY	7	7	0	0	0	0	7	8
CNTRL22	4	S	0.0000	4	8	YY	5	8	0	0	1	0	5	8
CNTRL22	4	S	0.0000	5	9	YY	5	5	0	0	0	0	6	5
CNTRL22	4	S	0.0000	5	10	YY	5	7	0	0	0	1	5	9
CNTRL22	4	S	0.0000	6	11	YY	6	8	0	0	0	0	7	8
CNTRL22	4	S	0.0000	6	12	YY	8	5	0	0	0	0	8	5
CNTRL22	4	S	0.0000	7	13	YY	10	6	0	0	0	0	10	6
CNTRL22	4	S	0.0000	7	14	YY	4	10	0	0	3	0	4	10
CNTRL22	4	S	0.0000	8	15	YY	5	6	0	0	0	0	5	6
CNTRL22	4	S	0.0000	8	16	YY	3	10	0	0	0	0	3	12
CNTRL22	4	S	0.0000	9	17	YY	5	9	0	0	0	0	5	9
CNTRL22	4	S	0.0000	9	18	YY	2	9	0	0	0	2	2	9
CNTRL22	4	S	0.0000	10	19	YY	3	7	0	0	1	0	3	7
CNTRL22	4	S	0.0000	10	20	Y	9	1	0	0	0	1	9	2
71-22	4	S	.0300	21	41	Y	4	4	0	0	0	0	9	5
71-22	4	S	.0300	21	42	YY	3	6	0	0	0	0	4	8
71-22	4	S	.0300	22	43	YY	5	7	0	0	0	0	6	7
71-22	4	S	.0300	22	44	YY	6	2	0	0	0	0	6	6
71-22	4	S	.0300	23	45	YY	3	10	0	0	1	0	3	10
71-22	4	S	.0300	23	46	YY	4	6	0	0	0	0	4	7
71-22	4	S	.0300	24	47	YY	5	7	0	0	0	0	6	9
71-22	4	S	.0300	24	48	YY	5	8	0	0	1	0	5	8
71-22	4	S	.0300	25	49	YY	9	5	0	0	0	0	9	5
71-22	4	S	.0300	25	50	YY	7	6	0	0	0	1	7	6
71-22	4	S	.0300	26	51	YY	4	6	0	0	0	0	5	6
71-22	4	S	.0300	26	52	YY	6	8	0	0	1	0	6	8
71-22	4	S	.0300	27	53	YY	2	9	0	0	0	0	2	9
71-22	4	S	.0300	27	54	YY	5	5	1	0	0	0	8	5
71-22	4	S	.0300	28	55	YY	4	6	0	0	0	0	5	7
71-22	4	S	.0300	28	56	YY	5	6	1	0	0	0	6	6
71-22	4	S	.0300	29	57	YY	9	9	1	0	0	2	9	9
71-22	4	S	.0300	29	58	YY	5	9	0	0	0	0	5	9
71-22	4	S	.0300	30	59	YY	5	8	1	1	0	0	6	8
71-22	4	S	.0300	30	60	Y	6	8	1	1	0	0	6	8

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

SODIUM META-BISULFITE

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS		EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
							L	R	L	R	L	R	L	R
71-22	4	S	.7000	31	61	Y	3	8	0	0	0	0	4	10
71-22	4	S	.7000	31	62	Y	7	8	2	0	0	0	7	8
71-22	4	S	.7000	32	63	Y	3	7	0	0	0	0	3	8
71-22	4	S	.7000	32	64	Y	7	4	1	0	0	0	8	5
71-22	4	S	.7000	33	65	Y	5	9	0	0	0	0	5	9
71-22	4	S	.7000	33	66	Y	10	4	1	0	0	0	11	5
71-22	4	S	.7000	34	67	Y	4	6	1	2	0	0	4	7
71-22	4	S	.7000	34	68	Y	2	10	0	0	0	0	2	11
71-22	4	S	.7000	35	69	Y	8	4	1	0	0	2	8	4
71-22	4	S	.7000	35	70	Y	6	6	0	0	0	0	7	7
71-22	4	S	.7000	36	71	Y	6	5	0	0	0	0	6	5
71-22	4	S	.7000	36	72	Y	8	2	0	0	0	0	8	2
71-22	4	S	.7000	37	73	Y	6	6	0	0	0	0	6	7
71-22	4	S	.7000	37	74	Y	6	8	0	1	0	0	6	8
71-22	4	S	.7000	38	75	Y	8	4	1	0	0	0	8	5
71-22	4	S	.7000	38	76	Y	6	8	0	0	0	0	10	10
71-22	4	S	.7000	39	77	Y	7	5	1	2	0	0	7	5
71-22	4	S	.7000	39	78	Y	6	6	0	0	0	0	6	6
71-22	4	S	.7000	40	79	Y	7	8	0	0	0	0	7	8
71-22	4	S	.7000	40	80	Y	1	0	1	0	0	0	5	7
71-22	4	S	1.2000	41	81	Y	7	4	0	0	0	0	9	5
71-22	4	S	1.2000	41	82	Y	4	7	0	0	0	0	4	7
71-22	4	S	1.2000	42	83	Y	8	4	6	2	2	0	9	6
71-22	4	S	1.2000	42	84	Y	3	10	0	0	0	0	4	10
71-22	4	S	1.2000	43	85	Y	4	1	0	0	0	0	5	8
71-22	4	S	1.2000	43	86	Y	4	7	0	0	0	0	4	9
71-22	4	S	1.2000	44	87	Y	7	2	0	0	0	0	7	7
71-22	4	S	1.2000	44	88	Y	8	6	0	0	0	0	9	6
71-22	4	S	1.2000	45	89	Y	7	2	0	0	1	0	8	5
71-22	4	S	1.2000	45	90	Y	6	7	0	1	0	2	7	7
71-22	4	S	1.2000	46	91	Y	6	6	0	0	2	2	6	7
71-22	4	S	1.2000	46	92	Y	5	8	0	0	0	0	5	9
71-22	4	S	1.2000	47	93	Y	1	2	0	0	0	0	7	5
71-22	4	S	1.2000	47	94	Y	2	3	0	0	0	0	2	8
71-22	4	S	1.2000	48	95	Y	7	4	0	0	3	0	7	4
71-22	4	S	1.2000	48	96	Y	7	6	0	0	0	0	7	7
71-22	4	S	1.2000	49	97	Y	6	7	0	1	0	0	9	10
71-22	4	S	1.2000	49	98	Y	6	7	1	1	0	0	6	7
71-22	4	S	1.2000	50	99	Y	3	9	1	1	0	1	3	9
71-22	4	S	1.2000	50	100	Y	7	4	3	1	0	0	16	6

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

SODIUM META-BISULFITE

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS		EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
							L	R	L	R	L	R	L	R
TEM22	4	S	.0002	11	21	Y	3	1	3	1	0	0	5	7
TEM22	4	S	.0002	11	22	Y	1	2	0	0	0	0	3	8
TEM22	4	S	.0002	12	23	YY	3	2	3	2	0	0	4	3
TEM22	4	S	.0002	12	24	N	-0	-0	-0	-0	-0	-0	-0	-0
TEM22	4	S	.0002	13	25	YY	2	7	2	7	0	0	4	7
TEM22	4	S	.0002	13	26	YY	1	2	1	2	0	0	4	9
TEM22	4	S	.0002	14	27	YY	2	2	2	2	0	0	6	5
TEM22	4	S	.0002	14	28	N	-0	-0	-0	-0	-0	-0	-0	-0
TEM22	4	S	.0002	15	29	YY	5	3	5	3	0	0	5	12
TEM22	4	S	.0002	15	30	YY	5	3	5	3	0	0	5	7
TEM22	4	S	.0002	16	31	YY	1	2	1	2	0	0	11	19
TEM22	4	S	.0002	16	32	YY	2	2	2	2	0	0	8	6
TEM22	4	S	.0002	17	33	YY	3	2	0	0	3	2	7	7
TEM22	4	S	.0002	17	34	YY	3	3	3	3	0	0	8	5
TEM22	4	S	.0002	18	35	YY	1	3	1	3	0	0	5	7
TEM22	4	S	.0002	18	36	N	-0	-0	-0	-0	-0	-0	-0	-0
TEM22	4	S	.0002	19	37	YY	3	2	0	0	3	2	8	14
TEM22	4	S	.0002	19	38	YY	1	0	1	0	0	0	7	5
TEM22	4	S	.0002	20	39	NY	-0	-0	-0	-0	-0	-0	-0	-0
TEM22	4	S	.0002	20	40	Y	1	4	1	4	0	0	4	7
CNTRL22	4	M	0.0000	1	1	Y	9	5	0	0	0	0	9	5
CNTRL22	4	M	0.0000	1	2	YY	8	8	0	0	0	1	9	8
CNTRL22	4	M	0.0000	2	3	YY	7	6	1	0	0	1	7	6
CNTRL22	4	M	0.0000	2	4	YY	11	6	0	0	0	0	11	6
CNTRL22	4	M	0.0000	3	5	YY	8	3	0	0	0	0	8	3
CNTRL22	4	M	0.0000	3	6	YY	8	4	0	0	0	0	8	5
CNTRL22	4	M	0.0000	4	7	YY	7	7	0	0	0	0	7	8
CNTRL22	4	M	0.0000	4	8	YY	5	8	0	0	0	0	5	8
CNTRL22	4	M	0.0000	5	9	YY	5	5	0	0	0	0	6	5
CNTRL22	4	M	0.0000	5	10	YY	5	7	0	0	0	1	5	9
CNTRL22	4	M	0.0000	6	11	YY	6	8	0	0	0	0	7	8
CNTRL22	4	M	0.0000	6	12	YY	8	5	0	0	0	0	8	5
CNTRL22	4	M	0.0000	7	13	YY	10	6	0	0	0	0	10	6
CNTRL22	4	M	0.0000	7	14	YY	4	10	0	0	3	0	4	10
CNTRL22	4	M	0.0000	8	15	YY	5	6	0	0	0	0	5	6
CNTRL22	4	M	0.0000	8	16	YY	3	10	0	0	0	0	3	12
CNTRL22	4	M	0.0000	9	17	YY	5	9	0	0	0	0	5	9
CNTRL22	4	M	0.0000	9	18	YY	2	9	0	0	0	0	2	9
CNTRL22	4	M	0.0000	10	19	YY	3	7	0	1	0	0	3	7
CNTRL22	4	M	0.0000	10	20	Y	9	1	0	0	1	0	9	2

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

SODIUM META-BISULFITE

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TEST MATERIAL	WEEK	S/M	DOSE	MALE		PREG.	IMPLANTS	EARLY		LATE		CORPORA LUTEA	
				NO.	NO.			L	R	L	R	L	R
71-22	4	M	.0300	11	21	Y	7	9	0	0	0	0	8 9
71-22	4	M	.0300	11	22	YY	5	6	1	3	1	0	5 6
71-22	4	M	.0300	12	23	Y	10	4	0	0	5	2	4 5
71-22	4	M	.0300	12	24	YY	5	7	0	0	0	0	5 6
71-22	4	M	.0300	13	25	YY	5	5	1	0	0	0	7 7
71-22	4	M	.0300	13	26	YY	7	4	0	0	0	0	4 4
71-22	4	M	.0300	14	27	YY	3	10	0	0	0	0	6 6
71-22	4	M	.0300	14	28	YY	6	7	1	0	0	0	6 7
71-22	4	M	.0300	15	29	YY	6	7	0	0	1	0	5 7
71-22	4	M	.0300	15	30	YY	5	7	0	0	0	0	5 7
71-22	4	M	.0300	16	31	YY	4	6	0	0	0	0	4 6
71-22	4	M	.0300	16	32	YY	3	1	0	0	3	1	5 6
71-22	4	M	.0300	17	33	YY	7	5	0	0	0	0	7 4
71-22	4	M	.0300	17	34	YY	7	4	0	0	2	0	5 4
71-22	4	M	.0300	18	35	YY	5	4	0	0	2	2	5 8
71-22	4	M	.0300	18	36	YY	6	8	0	0	2	1	6 8
71-22	4	M	.0300	19	37	YY	5	8	4	6	0	0	5 8
71-22	4	M	.0300	19	38	YY	6	5	0	0	4	2	6 5
71-22	4	M	.0300	20	39	YY	6	6	0	0	0	1	6 7
71-22	4	M	.0300	20	40	Y	4	7	1	3	0	0	6 8
71-22	4	M	.7000	21	41	Y	6	5	0	0	0	0	7 6
71-22	4	M	.7000	21	42	YY	3	6	0	0	0	0	5 6
71-22	4	M	.7000	22	43	YY	7	5	0	0	0	0	8 5
71-22	4	M	.7000	22	44	YY	3	8	0	0	0	0	4 8
71-22	4	M	.7000	23	45	YY	7	6	1	1	0	0	8 6
71-22	4	M	.7000	23	46	YY	6	5	0	0	0	0	5 5
71-22	4	M	.7000	24	47	YY	9	5	0	0	0	0	9 6
71-22	4	M	.7000	24	48	YY	9	4	0	0	0	0	10 6
71-22	4	M	.7000	25	49	YY	5	5	0	0	0	0	6 9
71-22	4	M	.7000	25	50	YY	3	8	0	0	0	0	3 8
71-22	4	M	.7000	26	51	YY	5	6	0	0	0	0	5 6
71-22	4	M	.7000	26	52	YY	4	9	0	0	0	0	4 9
71-22	4	M	.7000	27	53	YY	4	8	0	0	1	0	6 6
71-22	4	M	.7000	27	54	YY	6	6	0	0	0	0	6 6
71-22	4	M	.7000	28	55	YY	5	9	0	0	1	0	5 9
71-22	4	M	.7000	28	56	YY	2	3	0	0	0	0	5 6
71-22	4	M	.7000	29	57	YY	7	7	0	0	1	0	7 7
71-22	4	M	.7000	29	58	YY	5	5	0	0	0	0	5 5
71-22	4	M	.7000	30	59	YY	2	10	0	0	1	0	4 14
71-22	4	M	.7000	30	60	Y	3	7	0	1	0	0	3 7

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

SODIUM META-BISULFITE

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS		EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
							L	R	L	R	L	R	L	R
71-22	4	M	1.2000	31	61	Y	4	6	0	0	0	0	5	7
71-22	4	M	1.2000	31	62	YY	5	8	0	0	0	0	5	9
71-22	4	M	1.2000	32	63	YY	6	7	0	1	0	0	6	7
71-22	4	M	1.2000	32	64	YY	4	3	4	3	0	0	12	8
71-22	4	M	1.2000	33	65	YY	1	5	0	0	1	0	8	5
71-22	4	M	1.2000	33	66	YY	7	6	0	1	0	0	9	6
71-22	4	M	1.2000	34	67	YY	6	4	0	0	0	0	6	5
71-22	4	M	1.2000	34	68	YY	8	8	0	0	0	0	8	8
71-22	4	M	1.2000	35	69	YY	8	5	0	0	0	0	8	5
71-22	4	M	1.2000	35	70	YY	8	5	0	0	1	0	8	5
71-22	4	M	1.2000	36	71	YY	4	10	0	0	1	1	4	10
71-22	4	M	1.2000	36	72	YY	7	6	0	1	0	0	8	6
71-22	4	M	1.2000	37	73	YY	8	4	0	0	0	0	8	4
71-22	4	M	1.2000	37	74	YY	11	3	0	0	0	0	11	4
71-22	4	M	1.2000	38	75	YY	6	5	1	2	0	0	7	5
71-22	4	M	1.2000	38	76	YY	5	8	1	0	0	0	5	9
71-22	4	M	1.2000	39	77	YY	5	7	0	1	1	0	5	8
71-22	4	M	1.2000	39	78	YY	1	9	0	0	0	0	1	10
71-22	4	M	1.2000	40	79	YY	7	6	1	0	0	0	7	6
71-22	4	M	1.2000	40	80	Y	6	4	0	0	0	0	6	4

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

SODIUM META-BISULFITE

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TFST. MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY		LATE		CORPORA LUTEA		
								L	R	DEATHS L	DEATHS R	L	H	
CNTRL22	5	S	0.0000	1	1	Y	4	8	0	0	0	1	5	9
CNTRL22	5	S	0.0000	1	2	YY	1	3	0	0	0	0	3	7
CNTRL22	5	S	0.0000	2	3	YY	2	11	0	4	0	0	2	12
CNTRL22	5	S	0.0000	2	4	YY	5	6	0	0	0	0	5	6
CNTRL22	5	S	0.0000	3	5	YY	7	6	0	0	0	0	7	6
CNTRL22	5	S	0.0000	3	6	YY	5	7	0	0	0	4	5	7
CNTRL22	5	S	0.0000	4	7	YY	6	7	0	0	0	0	6	7
CNTRL22	5	S	0.0000	4	8	YY	5	9	0	0	0	0	5	9
CNTRL22	5	S	0.0000	5	9	YY	50	11	0	0	0	1	2	10
CNTRL22	5	S	0.0000	5	10	YY	3	11	0	0	0	0	3	11
CNTRL22	5	S	0.0000	6	11	YY	6	5	0	0	0	0	6	5
CNTRL22	5	S	0.0000	6	12	YY	5	6	0	1	1	0	5	6
CNTRL22	5	S	0.0000	7	13	YY	8	4	0	0	0	0	8	4
CNTRL22	5	S	0.0000	7	14	YY	6	4	0	0	0	0	6	5
CNTRL22	5	S	0.0000	8	15	YY	3	10	0	0	0	1	3	11
CNTRL22	5	S	0.0000	8	16	YY	3	7	0	0	0	0	3	7
CNTRL22	5	S	0.0000	9	17	YY	7	8	0	0	2	3	7	8
CNTRL22	5	S	0.0000	9	18	YY	6	7	0	0	0	2	6	7
CNTRL22	5	S	0.0000	10	19	YY	6	5	0	0	0	0	7	5
CNTRL22	5	S	0.0000	10	20	Y	4	8	0	0	0	0	4	8
71-22	5	S	.0300	21	41	YY	4	7	2	0	0	0	4	7
71-22	5	S	.0300	21	42	YY	7	5	0	0	0	0	7	5
71-22	5	S	.0300	22	43	YY	5	10	0	0	0	0	6	10
71-22	5	S	.0300	22	44	YY	7	6	1	0	0	0	7	8
71-22	5	S	.0300	23	45	YY	3	2	0	0	0	0	7	5
71-22	5	S	.0300	23	46	YY	0	5	0	0	0	0	7	5
71-22	5	S	.0300	24	47	YY	5	7	0	0	0	0	5	7
71-22	5	S	.0300	24	48	YY	0	0	-0	-0	-0	-0	-0	-0
71-22	5	S	.0300	25	49	YY	4	8	0	0	0	0	4	9
71-22	5	S	.0300	25	50	YY	6	7	0	0	2	1	6	7
71-22	5	S	.0300	26	51	YY	10	3	0	0	0	0	10	4
71-22	5	S	.0300	26	52	YY	6	5	1	0	0	0	6	5
71-22	5	S	.0300	27	53	YY	7	7	0	0	0	0	7	8
71-22	5	S	.0300	27	54	YY	4	9	0	1	0	0	6	10
71-22	5	S	.0300	28	55	YY	6	6	0	0	2	2	6	6
71-22	5	S	.0300	28	56	YY	7	3	1	0	0	0	9	4
71-22	5	S	.0300	29	57	YY	5	7	0	4	0	0	2	7
71-22	5	S	.0300	29	58	YY	2	5	0	0	1	0	0	2
71-22	5	S	.0300	30	59	YY	6	1	1	0	0	0	10	2
71-22	5	S	.0300	30	60	Y	5	7	0	0	0	0	5	7

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SODIUM META-BISULFITE

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TEST MATERIAL	WEEK	S/M.	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS		LATE DEATHS		CORPORAL LUTEA		
								L	R	L	R	L	R	
71-22	5	S	.7000	31	61	Y	5	4	0	0	0	0	7	6
71-22	5	S	.7000	31	62	Y	0	8	0	0	0	0	0	8
71-22	5	S	.7000	32	63	Y	7	7	0	0	0	0	8	7
71-22	5	S	.7000	32	64	Y	3	2	0	0	0	0	8	3
71-22	5	S	.7000	33	65	Y	4	9	1	0	0	0	5	9
71-22	5	S	.7000	33	66	Y	10	6	0	0	0	0	10	6
71-22	5	S	.7000	34	67	Y	5	8	1	1	0	0	5	8
71-22	5	S	.7000	34	68	Y	4	8	2	0	0	0	4	8
71-22	5	S	.7000	35	69	Y	10	2	0	0	0	0	11	2
71-22	5	S	.7000	35	70	Y	6	7	0	1	0	0	6	7
71-22	5	S	.7000	36	71	Y	5	8	0	0	0	0	5	8
71-22	5	S	.7000	36	72	Y	6	7	0	0	1	0	6	7
71-22	5	S	.7000	37	73	Y	6	5	0	0	0	0	6	5
71-22	5	S	.7000	37	74	Y	4	8	0	0	0	0	4	8
71-22	5	S	.7000	38	75	Y	1	8	0	0	1	1	3	10
71-22	5	S	.7000	38	76	Y	6	6	0	0	0	0	6	6
71-22	5	S	.7000	39	77	Y	5	9	1	1	0	0	7	10
71-22	5	S	.7000	39	78	Y	7	6	0	0	1	0	8	8
71-22	5	S	.7000	40	79	Y	7	5	0	0	0	0	7	5
71-22	5	S	.7000	40	80	Y	3	8	0	0	0	0	4	8
71-22	5	S	1.2000	41	81	Y	7	5	0	0	0	0	7	5
71-22	5	S	1.2000	41	82	Y	6	4	0	0	2	0	6	6
71-22	5	S	1.2000	42	83	Y	10	5	0	0	0	0	10	5
71-22	5	S	1.2000	42	84	Y	5	7	0	0	0	0	7	7
71-22	5	S	1.2000	43	85	Y	1	3	0	0	0	0	1	6
71-22	5	S	1.2000	43	86	Y	8	3	0	1	0	0	8	4
71-22	5	S	1.2000	44	87	Y	5	5	0	0	0	0	8	5
71-22	5	S	1.2000	44	88	Y	7	6	0	0	0	0	7	6
71-22	5	S	1.2000	45	89	Y	4	9	0	0	0	0	4	9
71-22	5	S	1.2000	45	90	Y	9	3	0	0	0	1	10	3
71-22	5	S	1.2000	46	91	Y	7	4	2	1	0	0	9	4
71-22	5	S	1.2000	46	92	Y	6	1	0	0	0	0	6	4
71-22	5	S	1.2000	47	93	Y	3	1	0	0	0	0	4	8
71-22	5	S	1.2000	47	94	Y	1	1	0	0	0	0	6	7
71-22	5	S	1.2000	48	95	Y	3	8	0	0	0	0	3	8
71-22	5	S	1.2000	48	96	Y	5	6	0	1	0	0	5	6
71-22	5	S	1.2000	49	97	Y	5	6	0	0	0	0	5	7
71-22	5	S	1.2000	49	98	Y	7	4	0	0	0	0	7	4
71-22	5	S	1.2000	50	99	Y	2	3	0	0	2	0	8	6
71-22	5	S	1.2000	50	100	Y	4	7	0	1	0	0	6	7

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SODIUM META-BISULFITE

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TEST-MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS L R	EARLY DEATHS		LATE DEATHS		CORPORA LUTEA L R		
								L	R	L	R	L	R	
TEM22	5	S	.0002	11	21	Y	5	7	0	0	1	0	5	7
TEM22	5	S	.0002	11	22	Y	9	7	0	0	2	1	9	9
TEM22	5	S	.0002	12	23	Y	5	6	1	0	0	0	5	6
TFM22	5	S	.0002	12	24	Y	0	4	0	0	0	0	8	6
TEM22	5	S	.0002	13	25	Y	3	8	3	4	0	0	3	8
TEM22	5	S	.0002	13	26	Y	4	6	2	2	0	0	4	6
TFM22	5	S	.0002	14	27	Y	9	8	0	0	3	0	9	8
TEM22	5	S	.0002	14	28	Y	3	6	0	0	0	0	3	6
TEM22	5	S	.0002	15	29	Y	5	0	4	0	0	0	9	1
TEM22	5	S	.0002	15	30	Y	5	6	0	1	2	0	5	6
TEM22	5	S	.0002	16	31	Y	7	6	1	0	2	0	7	5
TEM22	5	S	.0002	16	32	Y	7	5	4	2	2	1	8	5
TEM22	5	S	.0002	17	33	Y	1	4	1	4	0	0	1	7
TEM22	5	S	.0002	17	34	Y	8	6	2	0	0	0	8	6
TEM22	5	S	.0002	18	35	Y	3	10	0	1	1	0	4	10
TEM22	5	S	.0002	18	36	Y	5	2	4	2	0	0	8	8
TEM22	5	S	.0002	19	37	Y	2	7	1	2	0	0	2	6
TEM22	5	S	.0002	19	38	Y	2	0	1	1	0	0	4	4
TEM22	5	S	.0002	20	39	Y	4	9	0	2	2	1	4	10
TEM22	5	S	.0002	20	40	Y	4	6	0	4	0	0	6	6
CNTRL22	5	M	0.0000	1	1	Y	4	8	0	0	0	0	5	9
CNTRL22	5	M	0.0000	1	2	YY	1	3	0	0	0	0	3	7
CNTRL22	5	M	0.0000	2	3	YY	2	5	11	0	0	0	2	12
CNTRL22	5	M	0.0000	2	4	YY	5	6	0	0	0	0	5	6
CNTRL22	5	M	0.0000	3	5	YY	7	6	0	0	0	0	7	7
CNTRL22	5	M	0.0000	3	6	YY	5	7	0	0	0	0	5	7
CNTRL22	5	M	0.0000	4	7	YY	6	7	0	0	0	0	6	7
CNTRL22	5	M	0.0000	4	8	YY	5	9	0	0	0	0	5	9
CNTRL22	5	M	0.0000	5	9	YY	0	1	0	0	0	0	1	10
CNTRL22	5	M	0.0000	5	10	YY	3	11	0	0	0	0	3	11
CNTRL22	5	M	0.0000	6	11	YY	6	5	0	0	0	0	6	6
CNTRL22	5	M	0.0000	6	12	YY	5	6	0	1	1	0	8	4
CNTRL22	5	M	0.0000	7	13	YY	8	4	0	0	0	0	6	5
CNTRL22	5	M	0.0000	7	14	YY	6	4	0	0	0	0	3	11
CNTRL22	5	M	0.0000	8	15	YY	3	10	0	0	0	0	7	8
CNTRL22	5	M	0.0000	8	16	YY	3	7	0	0	0	0	7	7
CNTRL22	5	M	0.0000	9	17	YY	7	8	0	0	0	0	2	7
CNTRL22	5	M	0.0000	9	18	YY	6	7	0	0	0	0	6	7
CNTRL22	5	M	0.0000	10	19	YY	6	5	0	0	0	0	0	5
CNTRL22	5	M	0.0000	10	20	YY	4	8	0	0	0	0	4	8

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DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

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TEST MATERIAL	WEEK	S/M	DOSE	MALE		PREG.	IMPLANTS		EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
				NO.	NO.		L	R	L	R	L	R	L	R
71-22	5	M	1.2000	31	61	Y	3	6	0	0	0	0	3	9
71-22	5	M	1.2000	31	62	YY	2	8	0	0	1	1	2	9
71-22	5	M	1.2000	32	63	YY	6	7	1	1	0	0	6	7
71-22	5	M	1.2000	32	64	YY	5	7	0	0	0	0	5	7
71-22	5	M	1.2000	33	65	YY	3	8	0	0	0	0	4	8
71-22	5	M	1.2000	33	66	YY	7	4	0	0	2	0	8	4
71-22	5	M	1.2000	34	67	YY	2	8	1	0	0	0	2	9
71-22	5	M	1.2000	34	68	YY	8	6	0	1	0	0	8	7
71-22	5	M	1.2000	35	69	YY	3	8	0	2	0	0	3	8
71-22	5	M	1.2000	35	70	YY	8	3	0	0	1	0	10	12
71-22	5	M	1.2000	36	71	YY	5	6	0	0	0	0	5	6
71-22	5	M	1.2000	36	72	YY	5	3	0	0	0	0	5	3
71-22	5	M	1.2000	37	73	YY	5	7	0	0	0	0	7	5
71-22	5	M	1.2000	37	74	YY	7	5	0	0	1	0	5	8
71-22	5	M	1.2000	38	75	YY	4	7	0	0	0	0	7	6
71-22	5	M	1.2000	38	76	YY	7	5	1	0	0	0	5	8
71-22	5	M	1.2000	39	77	YY	4	8	0	0	0	0	9	6
71-22	5	M	1.2000	39	78	YY	9	6	0	0	0	0	4	9
71-22	5	M	1.2000	40	79	YY	4	8	0	0	0	0	6	8
71-22	5	M	1.2000	40	80	Y	6	8	0	0	0	0	6	8

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY		LATE		CORPORA LUTEA		
								L	R	L	R	L	R	
CNTRL22	6	S	0.0000	1	1	Y	8	3	0	0	0	0	9	4
CNTRL22	6	S	0.0000	1	2	YY	8	6	0	0	1	0	8	5
CNTRL22	6	S	0.0000	2	3	YY	5	5	0	0	0	0	6	6
CNTRL22	6	S	0.0000	2	4	YY	6	8	0	0	0	0	6	7
CNTRL22	6	S	0.0000	3	5	YY	6	7	0	0	0	0	6	9
CNTRL22	6	S	0.0000	3	6	YY	8	7	0	0	0	0	8	9
CNTRL22	6	S	0.0000	4	7	YY	6	6	1	0	0	0	6	6
CNTRL22	6	S	0.0000	4	8	YY	7	5	2	0	0	0	7	5
CNTRL22	6	S	0.0000	5	9	YY	5	8	0	0	0	0	5	8
CNTRL22	6	S	0.0000	5	10	YY	5	8	0	0	3	1	6	8
CNTRL22	6	S	0.0000	6	11	YY	4	7	0	0	0	0	4	11
CNTRL22	6	S	0.0000	6	12	YY	4	11	0	0	0	0	5	9
CNTRL22	6	S	0.0000	7	13	YY	4	8	0	0	0	0	8	3
CNTRL22	6	S	0.0000	7	14	YY	8	1	0	0	0	0	8	4
CNTRL22	6	S	0.0000	8	15	YY	8	3	0	0	1	1	8	4
CNTRL22	6	S	0.0000	8	16	YY	6	6	0	0	0	0	6	6
CNTRL22	6	S	0.0000	9	17	YY	7	7	0	0	0	0	7	7
CNTRL22	6	S	0.0000	9	18	YY	9	5	0	0	2	0	9	5
CNTRL22	6	S	0.0000	10	19	YY	9	6	0	0	0	0	7	6
CNTRL22	6	S	0.0000	10	20	YY	7	4	0	0	0	0	7	4
71-22	6	S	.0300	21	41	Y	6	6	0	0	0	0	6	6
71-22	6	S	.0300	21	42	YY	4	7	0	0	0	0	4	9
71-22	6	S	.0300	22	43	YY	8	4	0	0	0	1	9	4
71-22	6	S	.0300	22	44	YY	6	6	0	0	0	0	6	6
71-22	6	S	.0300	23	45	YY	6	6	0	0	0	0	6	9
71-22	6	S	.0300	23	46	YY	3	9	3	0	0	0	3	9
71-22	6	S	.0300	24	47	YY	9	3	0	0	0	0	10	3
71-22	6	S	.0300	24	48	YY	6	7	0	0	0	0	6	7
71-22	6	S	.0300	25	49	YY	5	5	0	0	3	1	6	5
71-22	6	S	.0300	25	50	YY	1	2	0	0	0	0	11	2
71-22	6	S	.0300	26	51	YY	7	5	0	0	0	0	7	6
71-22	6	S	.0300	26	52	YY	8	4	0	0	1	0	8	4
71-22	6	S	.0300	27	53	YY	6	6	0	1	0	0	6	6
71-22	6	S	.0300	27	54	YY	6	6	1	0	0	0	6	6
71-22	6	S	.0300	28	55	YY	7	5	0	0	0	0	8	5
71-22	6	S	.0300	28	56	YY	-0	-0	-0	-0	-0	-0	-0	-0
71-22	6	S	.0300	29	57	YY	3	8	0	0	1	0	5	9
71-22	6	S	.0300	29	58	YY	5	6	1	0	0	0	5	7
71-22	6	S	.0300	30	59	YY	1	5	0	0	0	1	4	9
71-22	6	S	.0300	30	60	YY	3	7	0	0	0	0	3	7

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS		LATE DEATHS		CORPORA LUTEA		
								L	R	L	R	L	R	
TEM22	6	S	.0002	11	21	Y	2	1	2	1	0	0	6	5
TEM22	6	S	.0002	11	22	YY	3	11	2	0	0	0	3	11
TEM22	6	S	.0002	12	23	Y	7	6	0	0	0	0	7	6
TEM22	6	S	.0002	12	24	Y	4	6	0	0	0	1	5	6
TEM22	6	S	.0002	13	25	YY	9	3	1	0	0	0	5	3
TEM22	6	S	.0002	13	26	YY	3	7	0	0	0	0	-0	-0
TEM22	6	S	.0002	14	27	N	-0	-0	-0	-0	-0	-0	7	6
TEM22	6	S	.0002	14	28	YY	6	6	0	0	1	0	7	3
TEM22	6	S	.0002	15	29	YY	6	3	0	0	0	0	5	8
TEM22	6	S	.0002	15	30	YY	3	8	0	0	0	2	8	4
TEM22	6	S	.0002	16	31	YY	8	4	0	0	0	0	4	9
TEM22	6	S	.0002	16	32	YY	3	3	0	0	2	1	2	10
TEM22	6	S	.0002	17	33	YY	2	9	0	0	0	0	9	5
TEM22	6	S	.0002	17	34	YY	9	5	2	1	0	1	-0	-0
TEM22	6	S	.0002	18	35	N	-0	-0	-0	-0	-0	-0	5	7
TEM22	6	S	.0002	18	36	YY	5	7	1	1	0	0	4	8
TEM22	6	S	.0002	19	37	YY	3	8	0	0	0	0	-0	-0
TEM22	6	S	.0002	19	38	N	-0	-0	-0	-0	-0	-0	5	7
TEM22	6	S	.0002	20	39	YY	5	5	0	0	0	1	8	4
TEM22	6	S	.0002	20	40	Y	6	4	0	0	0	0	-0	-0
CNTRL22	6	M	0.0000	1	1	Y	8	3	0	0	0	0	9	4
CNTRL22	6	M	0.0000	1	2	YY	8	6	0	0	1	0	8	6
CNTRL22	6	M	0.0000	2	3	YY	5	5	0	0	0	0	6	6
CNTRL22	6	M	0.0000	2	4	YY	6	7	0	0	0	0	6	7
CNTRL22	6	M	0.0000	3	5	YY	6	8	0	0	0	0	8	9
CNTRL22	6	M	0.0000	3	6	YY	8	7	0	0	0	0	6	6
CNTRL22	6	M	0.0000	4	7	YY	6	6	1	0	0	0	6	5
CNTRL22	6	M	0.0000	4	8	YY	7	2	0	0	0	0	7	5
CNTRL22	6	M	0.0000	5	9	YY	5	8	0	0	0	0	5	8
CNTRL22	6	M	0.0000	5	10	YY	5	8	0	0	3	1	6	8
CNTRL22	6	M	0.0000	6	11	YY	4	7	0	0	0	0	5	8
CNTRL22	6	M	0.0000	6	12	YY	4	11	0	0	0	0	4	11
CNTRL22	6	M	0.0000	7	13	YY	4	8	0	0	0	0	5	9
CNTRL22	6	M	0.0000	7	14	YY	8	1	0	0	1	1	8	4
CNTRL22	6	M	0.0000	8	15	YY	8	3	0	0	0	0	6	6
CNTRL22	6	M	0.0000	8	16	YY	6	6	0	0	0	0	7	7
CNTRL22	6	M	0.0000	9	17	YY	7	7	0	0	2	1	9	5
CNTRL22	6	M	0.0000	9	18	YY	9	5	0	0	0	0	9	6
CNTRL22	6	M	0.0000	10	19	YY	7	6	0	0	0	0	7	4
CNTRL22	6	M	0.0000	10	20	Y	7	4	0	0	0	0	-0	-0

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS		EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
							L	R	L	R	L	R	L	R
71-22	6	M	1.2000	31	61	Y	7	5	0	0	0	1	7	5
71-22	6	M	1.2000	31	62	YY	8	5	0	0	0	0	11	5
71-22	6	M	1.2000	32	63	YY	11	3	0	0	0	0	11	3
71-22	6	M	1.2000	32	64	YY	4	8	1	0	0	0	4	8
71-22	6	M	1.2000	33	65	YY	10	2	0	0	0	0	10	4
71-22	6	M	1.2000	33	66	YY	4	6	0	1	2	2	8	9
71-22	6	M	1.2000	34	67	Y	3	9	0	0	0	0	3	10
71-22	6	M	1.2000	34	68	N	-0	-0	-0	-0	-0	-0	-0	-0
71-22	6	M	1.2000	35	69	YY	8	5	2	0	0	0	8	5
71-22	6	M	1.2000	35	70	YY	5	7	0	0	0	0	5	8
71-22	6	M	1.2000	36	71	YY	8	5	0	0	0	0	9	6
71-22	6	M	1.2000	36	72	YY	4	8	0	0	0	0	4	8
71-22	6	M	1.2000	37	73	YY	0	4	0	0	0	0	9	4
71-22	6	M	1.2000	37	74	YY	5	7	0	0	0	0	6	8
71-22	6	M	1.2000	38	75	YY	8	4	0	1	0	0	9	5
71-22	6	M	1.2000	38	76	YY	-0	-0	-0	-0	-0	-0	-0	-0
71-22	6	M	1.2000	39	77	YY	8	4	0	0	0	0	8	5
71-22	6	M	1.2000	39	78	YY	3	8	0	0	0	0	3	10
71-22	6	M	1.2000	40	79	YY	6	6	0	0	0	0	6	6
71-22	6	M	1.2000	40	80	Y	5	7	0	0	0	0	8	9

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS		LATE DEATHS		CORPORA LUTEA		
								L	R	L	R	L	R	
CNTRL22	7	S	0.0000	1	1	Y	3	10	0	0	0	0	3	10
CNTRL22	7	S	0.0000	1	2	Y	3	3	0	1	0	0	8	10
CNTRL22	7	S	0.0000	2	3	Y	6	7	0	0	0	0	6	7
CNTRL22	7	S	0.0000	2	4	YY	4	6	0	1	0	0	5	8
CNTRL22	7	S	0.0000	3	5	YY	5	8	0	0	1	0	11	12
CNTRL22	7	S	0.0000	3	6	YY	7	6	0	0	0	0	8	5
CNTRL22	7	S	0.0000	4	7	YY	8	4	0	0	0	0	8	6
CNTRL22	7	S	0.0000	4	8	YY	8	6	1	0	0	0	6	7
CNTRL22	7	S	0.0000	5	9	YY	6	5	0	0	0	0	5	9
CNTRL22	7	S	0.0000	5	10	YY	5	8	2	0	0	0	6	6
CNTRL22	7	S	0.0000	6	11	YY	6	6	0	0	0	0	7	9
CNTRL22	7	S	0.0000	6	12	YY	5	7	0	0	0	0	12	3
CNTRL22	7	S	0.0000	7	13	YY	12	2	0	0	1	0	12	5
CNTRL22	7	S	0.0000	7	14	YY	7	3	0	0	0	0	7	3
CNTRL22	7	S	0.0000	8	15	YY	7	3	1	0	2	0	7	7
CNTRL22	7	S	0.0000	8	16	YY	8	7	2	0	0	1	7	5
CNTRL22	7	S	0.0000	9	17	YY	7	5	0	0	0	0	10	3
CNTRL22	7	S	0.0000	9	18	YY	10	3	0	0	0	0	4	12
CNTRL22	7	S	0.0000	10	19	YY	3	12	0	0	0	0	5	8
CNTRL22	7	S	0.0000	10	20	Y	5	8	0	2	0	1		
71-22	7	S	.0300	21	41	Y	1	0	0	0	0	0	7	5
71-22	7	S	.0300	21	42	YY	12	5	0	1	0	0	12	5
71-22	7	S	.0300	22	43	YY	7	6	0	0	0	0	10	9
71-22	7	S	.0300	22	44	YY	6	5	0	0	0	0	6	5
71-22	7	S	.0300	23	45	YY	5	7	0	0	0	0	5	9
71-22	7	S	.0300	23	46	YY	4	7	0	1	0	0	4	5
71-22	7	S	.0300	24	47	YY	7	4	0	0	0	0	7	6
71-22	7	S	.0300	24	48	YY	6	6	1	0	0	0	6	6
71-22	7	S	.0300	25	49	YY	7	7	0	0	0	0	8	7
71-22	7	S	.0300	25	50	YY	5	9	0	0	0	0	5	9
71-22	7	S	.0300	26	51	YY	4	9	0	1	0	0	4	10
71-22	7	S	.0300	26	52	YY	8	4	1	0	1	0	5	6
71-22	7	S	.0300	27	53	YY	5	6	0	0	0	2	6	9
71-22	7	S	.0300	27	54	YY	5	6	0	0	0	0	10	4
71-22	7	S	.0300	28	55	YY	10	4	0	0	0	0	7	5
71-22	7	S	.0300	28	56	YY	7	5	0	0	1	0	7	6
71-22	7	S	.0300	29	57	YY	7	5	0	0	1	0	8	7
71-22	7	S	.0300	29	58	YY	6	9	0	0	0	0	6	9
71-22	7	S	.0300	30	59	YY	8	7	0	0	0	3	2	1
71-22	7	S	.0300	30	60	Y	7	4	1	0	0	0	7	4

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS		EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
							L	R	L	R	L	R	L	R
71-22	7	S	.7000	31	61	Y	9	4	0	0	0	0	9	4
71-22	7	S	.7000	31	62	Y	4	10	0	0	0	0	4	10
71-22	7	S	.7000	32	63	Y	0	1	0	0	0	0	1	6
71-22	7	S	.7000	32	64	YY	7	5	0	0	0	0	8	3
71-22	7	S	.7000	33	65	YY	6	7	0	0	0	0	7	7
71-22	7	S	.7000	33	66	YY	2	9	0	0	0	0	2	11
71-22	7	S	.7000	34	67	YY	9	6	0	0	1	1	9	6
71-22	7	S	.7000	34	68	YY	4	5	0	0	0	0	8	5
71-22	7	S	.7000	35	69	YY	8	6	0	0	0	1	8	6
71-22	7	S	.7000	35	70	YY	4	6	0	0	0	1	5	8
71-22	7	S	.7000	36	71	YY	5	8	0	0	0	0	7	6
71-22	7	S	.7000	36	72	YY	5	6	0	0	0	0	6	5
71-22	7	S	.7000	37	73	YY	6	9	0	0	0	0	12	2
71-22	7	S	.7000	37	74	YY	9	2	0	0	0	0	6	6
71-22	7	S	.7000	38	75	YY	6	6	0	0	0	0	3	7
71-22	7	S	.7000	38	76	YY	3	7	0	0	0	0	9	5
71-22	7	S	.7000	39	77	YY	9	5	0	0	0	0	3	8
71-22	7	S	.7000	39	78	YY	3	8	0	0	0	0	8	4
71-22	7	S	.7000	40	79	YY	7	4	0	0	0	0	1	5
71-22	7	S	.7000	40	80	Y	6	5	1	0	0	0	8	8
71-22	7	S	1.2000	41	81	Y	5	4	1	0	0	3	2	5
71-22	7	S	1.2000	41	82	YY	10	5	0	0	0	0	10	5
71-22	7	S	1.2000	42	83	YY	8	4	0	0	0	0	8	4
71-22	7	S	1.2000	42	84	YY	8	4	2	1	1	0	8	4
71-22	7	S	1.2000	43	85	YY	5	10	0	0	1	0	5	10
71-22	7	S	1.2000	43	86	YY	7	8	0	0	0	1	7	8
71-22	7	S	1.2000	44	87	YY	2	10	0	0	0	0	4	10
71-22	7	S	1.2000	44	88	YY	2	10	0	0	0	0	6	6
71-22	7	S	1.2000	45	89	YY	5	4	0	0	0	0	8	5
71-22	7	S	1.2000	45	90	YY	0	1	0	0	0	0	8	5
71-22	7	S	1.2000	46	91	YY	8	5	1	0	0	0	7	7
71-22	7	S	1.2000	46	92	YY	4	6	2	4	1	2	4	7
71-22	7	S	1.2000	47	93	YY	4	6	0	0	0	0	5	7
71-22	7	S	1.2000	47	94	YY	3	7	0	0	0	0	9	9
71-22	7	S	1.2000	48	95	YY	3	5	0	0	1	0	9	8
71-22	7	S	1.2000	48	96	YY	7	7	0	0	1	0	6	6
71-22	7	S	1.2000	49	97	YY	3	7	0	0	0	0	8	3
71-22	7	S	1.2000	49	98	YY	5	6	0	0	0	0	8	4
71-22	7	S	1.2000	50	99	YY	8	4	2	2	0	0	0	0
71-22	7	S	1.2000	50	100	Y	8	4	2	2	0	0	0	0

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

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TEST MATERIAL	WEEK	S/M	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS		LATE DEATHS		CORPORA LUTEA		
								L	R	L	R	L	R	
TEM22	7	S	.0002	11	21	Y	8	6	0	0	0	1	8	6
TEM22	7	S	.0002	11	22	YY	2	1	1	0	0	0	6	7
TEM22	7	S	.0002	12	23	YY	6	6	2	2	0	0	6	6
TEM22	7	S	.0002	12	24	YY	6	7	0	2	0	0	6	7
TEM22	7	S	.0002	13	25	YY	5	10	0	0	0	0	5	10
TEM22	7	S	.0002	13	26	YY	4	8	0	1	0	0	6	8
TEM22	7	S	.0002	14	27	YY	8	8	1	0	0	0	8	5
TEM22	7	S	.0002	14	28	YY	8	4	0	1	0	0	5	7
TEM22	7	S	.0002	15	29	YY	6	7	0	0	0	0	6	6
TEM22	7	S	.0002	15	30	YY	6	5	0	0	3	2	6	5
TEM22	7	S	.0002	16	31	YY	5	8	0	0	2	0	5	8
TEM22	7	S	.0002	16	32	YY	5	8	0	0	1	0	6	8
TEM22	7	S	.0002	17	33	YY	10	3	2	1	0	0	10	4
TEM22	7	S	.0002	17	34	YY	4	8	0	0	0	0	4	8
TEM22	7	S	.0002	18	35	YY	4	7	0	0	0	0	7	6
TEM22	7	S	.0002	18	36	YY	7	5	0	0	0	0	7	6
TEM22	7	S	.0002	19	37	YY	7	6	0	0	3	1	7	6
TEM22	7	S	.0002	19	38	YY	7	0	3	0	0	0	5	9
TEM22	7	S	.0002	20	39	YY	9	6	0	1	1	0	9	6
TEM22	7	S	.0002	20	40	Y	7	4	1	0	0	0	8	4
CNTRL22	7	M	0.0000	1	1	Y	3	10	0	0	0	0	3	10
CNTRL22	7	M	0.0000	1	2	YY	3	3	0	1	0	0	8	10
CNTRL22	7	M	0.0000	2	3	YY	6	7	0	0	0	0	6	7
CNTRL22	7	M	0.0000	2	4	YY	4	6	0	1	0	0	4	7
CNTRL22	7	M	0.0000	3	5	YY	5	8	0	0	1	0	5	8
CNTRL22	7	M	0.0000	3	6	YY	7	6	0	0	0	0	11	12
CNTRL22	7	M	0.0000	4	7	YY	8	4	0	0	0	0	8	5
CNTRL22	7	M	0.0000	4	8	YY	8	6	1	0	0	0	8	6
CNTRL22	7	M	0.0000	5	9	YY	6	5	0	0	0	0	6	7
CNTRL22	7	M	0.0000	5	10	YY	5	8	2	0	0	0	5	9
CNTRL22	7	M	0.0000	6	11	YY	6	6	0	0	0	0	6	6
CNTRL22	7	M	0.0000	6	12	YY	5	7	0	0	0	0	7	9
CNTRL22	7	M	0.0000	7	13	YY	12	2	0	0	1	0	12	3
CNTRL22	7	M	0.0000	7	14	YY	7	3	0	0	0	0	9	5
CNTRL22	7	M	0.0000	8	15	YY	7	8	1	0	2	0	7	7
CNTRL22	7	M	0.0000	8	16	YY	7	7	2	0	0	0	7	5
CNTRL22	7	M	0.0000	9	17	YY	10	3	0	0	0	0	10	3
CNTRL22	7	M	0.0000	9	18	YY	3	12	0	0	0	0	4	12
CNTRL22	7	M	0.0000	10	19	Y	5	8	0	2	0	1	5	8
CNTRL22	7	M	0.0000	10	20	Y	5	8	0	2	0	1	5	8

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DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

SODIUM META-BISULFITE

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TEST MATERIAL	WEEK	S/M.	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS		LATE DEATHS		CORPORA LUTEA		
								L	R	L	R	L	R	
71-22	7	M	1,2000	31	61	Y	8	5	0	0	0	0	8	5
71-22	7	M	1,2000	31	62	Y	5	6	0	0	1	0	6	8
71-22	7	M	1,2000	32	63	Y	7	7	0	0	0	0	7	7
71-22	7	M	1,2000	32	64	Y	5	5	1	0	0	0	5	6
71-22	7	M	1,2000	33	65	Y	1	5	0	0	1	1	6	5
71-22	7	M	1,2000	33	66	Y	7	6	0	0	0	0	7	6
71-22	7	M	1,2000	34	67	Y	7	6	0	0	0	0	7	6
71-22	7	M	1,2000	34	68	Y	5	6	0	0	0	0	5	6
71-22	7	M	1,2000	35	69	Y	5	7	0	0	0	1	5	7
71-22	7	M	1,2000	35	70	Y	4	0	0	0	0	0	6	5
71-22	7	M	1,2000	36	71	Y	6	9	0	0	0	2	6	9
71-22	7	M	1,2000	36	72	Y	2	7	0	0	0	0	4	7
71-22	7	M	1,2000	37	73	Y	7	6	0	0	0	0	7	6
71-22	7	M	1,2000	37	74	Y	8	4	0	0	0	0	8	5
71-22	7	M	1,2000	38	75	Y	6	6	0	0	0	0	7	6
71-22	7	M	1,2000	38	76	Y	7	5	1	0	0	0	7	6
71-22	7	M	1,2000	39	77	Y	6	5	0	0	0	0	6	6
71-22	7	M	1,2000	39	78	Y	6	4	0	0	0	0	7	4
71-22	7	M	1,2000	40	79	Y	3	6	0	0	0	0	3	7
71-22	7	M	1,2000	40	80	Y	4	8	0	0	0	0	4	8

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TEST MATERIAL	WEEK	S/M	DOSE	MALE		PREG.	IMPLANTS		EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
				NO.	NO.		L	R	L	R	L	R	L	R
CNTRL22	8	S	0.0000	1	1	Y	7	5	0	0	1	0	7	5
CNTRL22	8	S	0.0000	1	2	YY	5	8	1	0	0	0	5	8
CNTRL22	8	S	0.0000	2	3	YY	5	9	0	0	0	0	5	9
CNTRL22	8	S	0.0000	2	4	YY	7	4	0	0	0	0	7	4
CNTRL22	8	S	0.0000	3	5	YY	10	3	0	0	0	0	10	3
CNTRL22	8	S	0.0000	3	6	YY	5	6	0	0	0	0	5	6
CNTRL22	8	S	0.0000	4	7	YY	7	3	0	0	0	0	8	3
CNTRL22	8	S	0.0000	4	8	YY	7	7	0	0	0	0	8	7
CNTRL22	8	S	0.0000	5	9	YY	9	5	0	0	0	0	9	5
CNTRL22	8	S	0.0000	5	10	YY	4	2	0	0	0	0	7	7
CNTRL22	8	S	0.0000	6	11	YY	7	7	0	0	0	0	6	7
CNTRL22	8	S	0.0000	6	12	YY	6	7	0	0	2	1	7	6
CNTRL22	8	S	0.0000	7	13	YY	6	6	0	0	0	0	8	4
CNTRL22	8	S	0.0000	7	14	YY	7	4	0	0	0	0	9	3
CNTRL22	8	S	0.0000	8	15	YY	9	3	0	0	0	0	7	6
CNTRL22	8	S	0.0000	8	16	YY	5	5	0	0	0	0	8	5
CNTRL22	8	S	0.0000	9	17	YY	5	0	0	0	0	0	-0	-0
CNTRL22	8	S	0.0000	9	18	N	-0	-0	-0	-0	-0	-0	8	7
CNTRL22	8	S	0.0000	10	19	YY	8	7	0	1	0	0	5	9
CNTRL22	8	S	0.0000	10	20	Y	4	9	0	0	0	0		
71-22	8	S	.0300	21	41	Y	8	5	0	1	0	0	10	5
71-22	8	S	.0300	21	42	YY	5	4	0	0	0	0	6	4
71-22	8	S	.0300	22	43	YY	3	1	1	0	0	0	4	5
71-22	8	S	.0300	22	44	YY	6	3	0	0	0	0	8	5
71-22	8	S	.0300	23	45	YY	0	6	0	0	0	0	4	6
71-22	8	S	.0300	23	46	YY	5	7	0	0	0	0	7	8
71-22	8	S	.0300	24	47	YY	6	3	0	0	0	0	6	3
71-22	8	S	.0300	24	48	YY	3	4	0	0	0	0	5	7
71-22	8	S	.0300	25	49	YY	5	8	0	0	0	0	6	6
71-22	8	S	.0300	25	50	YY	8	5	0	0	0	0	8	5
71-22	8	S	.0300	26	51	Y	1	2	0	0	1	0	6	5
71-22	8	S	.0300	26	52	YY	4	8	0	0	2	1	5	8
71-22	8	S	.0300	27	53	YY	5	4	0	1	0	0	5	6
71-22	8	S	.0300	27	54	YY	6	6	1	0	0	0	6	6
71-22	8	S	.0300	28	55	YY	7	6	0	0	0	0	7	6
71-22	8	S	.0300	28	56	YY	2	7	0	0	1	0	3	11
71-22	8	S	.0300	29	57	YY	6	6	0	0	2	0	8	7
71-22	8	S	.0300	29	58	YY	7	5	0	0	0	0	7	5
71-22	8	S	.0300	30	59	YY	4	10	0	0	0	0	5	10
71-22	8	S	.0300	30	60	Y	8	4	0	0	0	0	8	4

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

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TEST MATERIAL	WEEK	S/M.	DOSE	MALE NO.	FEMALE NO.	PREG.	IMPLANTS	EARLY DEATHS		LATE DEATHS		CORPORA LUTEA		
								L	R	L	R	L	R	
71-22	8	S	.7000	31	61	Y	7	6	0	0	1	0	8	6
71-22	8	S	.7000	31	62	YY	4	10	0	0	0	0	4	10
71-22	8	S	.7000	32	63	YY	8	6	0	0	3	1	9	6
71-22	8	S	.7000	32	64	YY	10	5	0	0	0	0	10	5
71-22	8	S	.7000	33	65	YY	6	9	0	0	0	0	6	9
71-22	8	S	.7000	33	66	YY	4	7	1	0	0	0	7	7
71-22	8	S	.7000	34	67	YY	5	8	0	0	0	0	5	8
71-22	8	S	.7000	34	68	YY	4	5	0	1	1	0	4	7
71-22	8	S	.7000	35	69	YY	4	7	0	1	0	0	4	7
71-22	8	S	.7000	35	70	YY	5	7	1	0	0	3	5	8
71-22	8	S	.7000	36	71	YY	6	5	0	0	0	0	6	5
71-22	8	S	.7000	36	72	YY	8	3	0	0	0	0	9	3
71-22	8	S	.7000	37	73	YY	6	6	0	0	0	0	7	6
71-22	8	S	.7000	37	74	YY	8	6	0	0	1	1	8	6
71-22	8	S	.7000	38	75	YY	5	7	0	1	0	0	5	7
71-22	8	S	.7000	38	76	YY	4	7	0	0	0	0	4	7
71-22	8	S	.7000	39	77	YY	5	4	0	0	0	0	9	5
71-22	8	S	.7000	39	78	YY	6	4	1	1	2	1	7	5
71-22	8	S	.7000	40	79	YY	7	3	0	0	0	0	7	3
71-22	8	S	.7000	40	80	Y	4	7	0	0	0	0	4	7
71-22	8	S	1.2000	41	81	Y	10	4	1	0	0	1	10	4
71-22	8	S	1.2000	41	82	YY	5	8	0	0	0	0	5	8
71-22	8	S	1.2000	42	83	YY	5	3	0	0	0	0	7	6
71-22	8	S	1.2000	42	84	YY	9	4	1	0	0	0	9	4
71-22	8	S	1.2000	43	85	YY	7	9	0	0	0	0	7	9
71-22	8	S	1.2000	43	86	YY	5	8	0	0	0	0	5	8
71-22	8	S	1.2000	44	87	YY	9	5	0	0	0	0	9	5
71-22	8	S	1.2000	44	88	NY	-0	-0	-0	-0	-0	-0	-0	-0
71-22	8	S	1.2000	45	89	YY	7	5	0	0	3	1	7	5
71-22	8	S	1.2000	45	90	YY	4	7	0	0	1	1	4	7
71-22	8	S	1.2000	46	91	YY	6	4	0	0	0	0	6	4
71-22	8	S	1.2000	46	92	YY	8	5	0	0	2	1	8	5
71-22	8	S	1.2000	47	93	YY	7	6	0	0	1	0	7	6
71-22	8	S	1.2000	47	94	YY	7	3	0	1	3	0	7	3
71-22	8	S	1.2000	48	95	YY	7	4	0	0	0	0	7	4
71-22	8	S	1.2000	48	96	YY	11	4	0	0	0	0	11	4
71-22	8	S	1.2000	49	97	YY	9	4	0	0	0	0	9	8
71-22	8	S	1.2000	49	98	YY	5	7	0	1	0	0	5	8
71-22	8	S	1.2000	50	99	YY	6	5	0	0	0	0	6	5
71-22	8	S	1.2000	50	100	Y	5	8	0	1	0	0	7	9

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

SODIUM META-BISULFITE

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TFST MATERIAL	WEEK	S/M	DOSE	MALE	FEMALE	PREG.	IMPLANTS		EARLY DEATHS		LATE DEATHS		CORPORA LUTEA	
				NO.	NO.		L	R	L	R	L	R	L	R
TEM22	8	S	.0002	11	21	Y	7	5	0	0	0	0	7	5
TEM22	8	S	.0002	11	22	YY	6	9	1	1	0	0	7	9
TEM22	8	S	.0002	12	23	Y	5	8	0	1	1	3	9	7
TEM22	8	S	.0002	12	24	YY	7	7	0	0	0	0	7	9
TEM22	8	S	.0002	13	25	Y	5	9	0	0	0	0	3	9
TEM22	8	S	.0002	13	26	YY	3	9	0	0	0	0	6	7
TEM22	8	S	.0002	14	27	Y	6	7	1	0	0	0	7	5
TEM22	8	S	.0002	14	28	YY	7	5	0	0	0	1	7	6
TEM22	8	S	.0002	15	29	Y	8	5	0	0	0	0	8	8
TEM22	8	S	.0002	15	30	YY	5	8	0	0	0	0	7	9
TEM22	8	S	.0002	16	31	Y	1	0	0	0	0	0	3	2
TEM22	8	S	.0002	16	32	YY	8	2	0	0	0	0	9	2
TEM22	8	S	.0002	17	33	Y	3	9	0	0	0	0	3	9
TEM22	8	S	.0002	17	34	YY	6	7	0	0	0	0	6	7
TEM22	8	S	.0002	18	35	Y	8	3	1	0	0	0	8	8
TEM22	8	S	.0002	18	36	YY	4	8	0	0	0	0	5	6
TEM22	8	S	.0002	19	37	Y	3	6	0	0	0	0	7	5
TEM22	8	S	.0002	19	38	YY	6	0	0	0	0	0	7	5
TEM22	8	S	.0002	20	39	Y	6	5	0	0	1	0	6	5
TEM22	8	S	.0002	20	40	Y	3	7	0	0	0	0	1	3

CHI-SQUARE TEST OF THE FERTILITY INDEX (1 DEGREE OF FREEDOM)

WEEK	VEHICLE CONTROL				71-22 .03 G/KG				71-22 .7 G/KG				71-22 1.2 G/KG				TEM .2 MG/KG			
	N	N	FERT.		N	N	FERT.		N	N	FERT.		N	N	FERT.		N	N	FERT.	
	PRG	MFD	INDEX	CHISQ	PRG	MFD	INDEX	CHISQ	PRG	MFD	INDEX	CHISQ	PRG	MFD	INDEX	CHISQ	PRG	MFD	INDEX	CHISQ
SINGLE TREATMENT																				
1	18	20	.90	0.00	18	20	.90	.28	20	20	1.00	.53	19	20	.95	0.00	20	20	1.00	.53
2	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	16	20	.80	2.50	20	20	1.00	0.00
3	20	20	1.00	0.00	18	20	.90	.53	18	20	.90	.53	19	20	.95	0.00	20	20	1.00	0.00
4	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	15	20	.80	2.50
5	20	20	1.00	0.00	19	20	.95	0.00	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00
6	21	20	1.00	0.00	19	20	.95	0.00	19	20	.95	0.00	16	20	.80	2.50	17	20	.85	1.45
7	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00
8	19	20	.95	0.01	20	20	1.00	0.00	20	20	1.00	0.00	19	20	.95	.53	20	20	1.00	0.00
MULTIPLE TREATMENT																				
1	18	20	.90	0.00	18	20	.90	.28	14	20	.70	1.41	18	20	.90	.28				
2	20	20	1.00	0.00	19	20	.95	0.00	18	20	.90	.53	19	20	.95	0.00				
3	20	20	1.00	0.00	19	20	.95	0.00	18	20	.90	.53	20	20	1.00	0.00				
4	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00	20	20	1.00	0.00				
5	20	20	1.00	0.00	20	20	1.00	0.00	17	20	.85	1.44	20	20	1.00	0.00				
6	20	20	1.00	0.00	19	20	.95	0.00	17	20	.85	1.44	18	20	.90	.53				
7	20	20	1.00	0.00	20	20	1.00	0.00	16	20	.80	2.50	20	20	1.00	0.00				

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE FERTILITY INDEX
(1 DEGREE OF FREEDOM) BASED ON THE DOSE LEVELS

WEEK	.63 G/KG				.7 G/KG				1.2 G/KG			
	N		N		N		N		CHTSQ		CHTSQ	
	PRG	MTD	PRG	MTD	PRG	MTD	PRG	MTD	(C-1)	(1)	CHTSQ	ARMTG
SINGLE TREATMENT												
1	18	20	20	20	19	20	2.11	.69	1.42			
2	20	20	20	20	16	20	8.57	5.78	2.79			
3	18	20	18	20	19	20	.44	.29	.14			
4	20	20	20	20	20	20	0.00	0.00	0.00			
5	19	20	20	20	20	20	2.03	1.67	.37			
6	19	20	19	20	16	20	3.33	2.25	1.09			
7	20	20	20	20	20	20	0.00	0.00	0.00			
8	20	20	20	20	14	20	2.03	1.37	.66			
MULTIPLE TREATMENT												
1	18	20	14	20	18	20	3.84	.03	3.81			
2	19	20	18	20	19	20	.54	.00	.53			
3	19	20	18	20	20	20	2.11	.38	1.72			
4	20	20	20	20	20	20	0.00	0.00	0.00			
5	20	20	17	20	20	20	6.32	.04	6.27			
6	19	20	17	20	18	20	1.11	.36	.75			
7	20	20	16	20	20	20	8.57	.06	8.51			

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE FERTILITY INDEX
 (1 DEGREE OF FREEDOM) BASED ON THE LOGARITHMS OF THE DOSE LEVELS

WEEK	.63 G/KG		.7 G/KG		1.2 G/KG		CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
	N	N	N	N	PRG	MTD			
	PRG	MTD	PRG	MTD	PRG	MTD			
SINGLE TREATMENT									
1	18	20	21	20	19	20	2.11	1.32	.79
2	20	20	20	20	16	20	8.57	3.22	5.36
3	18	20	18	20	19	20	.44	.16	.27
4	20	20	20	20	20	20	0.00	0.00	0.00
5	19	20	20	20	20	20	2.03	2.00	.04
6	19	20	19	20	16	20	3.33	1.25	2.08
7	20	20	20	20	20	20	0.00	0.00	0.00
8	20	20	20	20	19	20	2.03	.76	1.27
MULTIPLE TREATMENT									
1	18	20	14	20	19	20	3.84	.55	3.29
2	19	20	18	20	19	20	.54	.08	.46
3	19	20	14	20	20	20	2.11	.04	2.07
4	20	20	20	20	20	20	0.00	0.00	0.00
5	20	20	17	20	20	20	6.32	.90	5.41
6	19	20	17	20	18	20	1.11	.69	.42
7	20	20	16	20	20	20	8.57	1.23	7.34

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE FERTILITY INDEX
 (2 DEGREES OF FREEDOM) BASED ON THE DOSE LEVELS AND INCLUDING THE CONTROL GROUP

WEEK	CONTROL		.03 G/KG		.7 G/KG		1.2 G/KG		CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
	N PRG	N MTD	N PRG	N MTD	N PRG	N MTD	N PRG	N MTD			
SINGLE TREATMENT											
1	18	20	18	20	20	20	19	20	2.35	1.13	1.21
2	20	20	20	20	20	20	16	20	12.63	8.67	3.96
3	20	20	18	20	18	20	19	20	2.35	.05	2.29
4	20	20	20	20	20	20	20	20	0.00	0.00	0.00
5	20	20	19	20	20	20	20	20	3.04	.83	2.21
6	20	20	19	20	19	20	16	20	6.49	5.01	1.48
7	20	20	20	20	20	20	20	20	0.00	0.00	0.00
8	19	20	20	20	20	20	19	20	2.05	.11	1.94

MULTIPLE TREATMENT											
1	18	20	18	20	14	20	18	20	4.71	.30	4.41
2	20	20	19	20	18	20	19	20	2.11	.52	1.59
3	20	20	19	20	18	20	20	20	3.81	.00	3.81
4	20	20	20	20	20	20	20	20	0.00	0.00	0.00
5	20	20	20	20	17	20	20	20	9.35	.59	8.76
6	20	20	19	20	17	20	18	20	3.60	1.93	1.68
7	20	20	20	20	16	20	20	20	12.63	.80	11.83

DOMINANT LETHAL GENE STUDY OF COMPOUND 71-22

SODIUM META-BISULFITE

PÁGÉ 43

T-TEST OF THE NUMBER OF IMPLANTATIONS IN PREGNANT FEMALES.

REGRESSION FITS OF THE NUMBER, U, OF IMPLANTATIONS ON 1) DOSE, AND 2) LOG DOSE.
(PREDICTED U = A + B*X) CONTROL GROUP EXCLUDED

WEEK	X	N	KRAP	SD X	UBAR	SD U	B	A	TR	DF	VARU/X	CV U	VARB	VARA	VARUBAR
SINGLE TREATMENT															
1	DOSE	57	.66	.48	11.33	2.71	.158	11.230	.206 55	7.4609	.2410	.5868	.3827	.1309	
	LOG DOSE	57	-1.17	1.62	11.33	2.71	.031	11.370	.139 55	7.4641	.2411	.0510	.2010	.1309	
2	DOSE	56	.60	.48	11.39	3.08	-.235	11.535	-.267 54	9.5790	.2731	.7770	.4559	.1728	
	LOG DOSE	56	+1.33	1.65	11.39	3.08	-.136	11.212	-.539 54	9.6400	.2725	.0641	.2852	.1721	
3	DOSE	55	.65	.49	11.91	2.37	-.019	12.575	-1.550 53	5.4971	.1959	.4325	.2846	.0999	
	LOG DOSE	55	-1.20	1.64	11.91	2.37	-.392	11.438	-2.044 53	5.3263	.1938	.0368	.1499	.0968	
4	DOSE	60	.64	.48	11.42	2.84	-.941	12.022	-1.235 58	8.0065	.2478	.5803	.3738	.1334	
	LOG DOSE	60	-1.23	1.64	11.42	2.84	-.221	11.146	-.978 58	8.0838	.2490	.0509	.2114	.1347	
5	DOSE	59	.65	.48	10.85	3.04	-.926	11.453	-1.118 57	9.1952	.2795	.6861	.4490	.1559	
	LOG DOSE	59	-1.19	1.63	10.85	3.04	-.133	10.689	-.539 57	9.3493	.2819	.0609	.2445	.1585	
6	DOSE	54	.61	.48	11.56	2.20	.864	11.026	1.376 52	4.7748	.1891	.3941	.2362	.0884	
	LOG DOSE	54	-1.31	1.65	11.56	2.20	.289	11.933	1.599 52	4.7167	.1879	.0326	.1429	.0873	
7	DOSE	60	.64	.49	11.37	3.01	-1.233	12.160	-1.539 58	8.8446	.2616	.6416	.4130	.1474	
	LOG DOSE	60	-1.23	1.64	11.37	3.01	-.340	10.950	-1.435 58	8.8900	.2623	.0560	.2324	.1482	
8	DOSE	59	.63	.48	11.47	2.53	1.985	10.216	3.077 57	5.6075	.2064	.4163	.2623	.0950	
	LOG DOSE	59	-1.25	1.64	11.47	2.53	.594	12.218	3.152 57	5.5681	.2056	.0355	.1499	.0944	
MULTIPLE TREATMENTS															
1	DOSE	50	.64	.50	11.74	3.34	.935	11.143	.944 48	11.1832	.2848	.9024	.5919	.2237	
	LOG DOSE	50	-1.30	1.69	11.74	3.34	.251	12.066	.887 48	11.2248	.2854	.0804	.3596	.2245	
2	DOSE	56	.64	.49	11.54	2.54	-.981	12.166	-1.411 54	6.3211	.2179	.4828	.3121	.1129	
	LOG DOSE	56	-1.24	1.65	11.54	2.54	-.267	11.204	-1.299 54	6.3557	.2185	.0423	.1789	.1135	
3	DOSE	57	.65	.49	10.89	2.93	.278	10.714	.344 55	8.7333	.2713	.6518	.4304	.1532	
	LOG DOSE	57	-1.22	1.65	10.89	2.93	.042	10.946	.177 55	8.7472	.2715	.0575	.2387	.1535	
4	DOSE	60	.64	.48	11.62	2.27	.149	11.521	.242 58	5.2392	.1970	.3801	.2446	.0873	
	LOG DOSE	60	-1.23	1.64	11.62	2.27	.019	11.640	.105 58	5.2435	.1971	.0330	.1371	.0874	
5	DOSE	57	.64	.50	11.59	2.75	-.333	11.732	-.546 55	5.1339	.1957	.3727	.2429	.0901	
	LOG DOSE	57	-1.27	1.67	11.59	2.75	-.131	11.412	-.726 55	5.1127	.1953	.0327	.1426	.0897	
6	DOSE	54	.63	.49	11.70	2.50	.413	11.443	.587 52	6.3285	.2149	.4955	.3144	.1172	
	LOG DOSE	54	-1.29	1.67	11.70	2.50	.177	11.444	.855 52	6.2820	.2142	.0427	.1868	.1163	
7	DOSE	56	.64	.50	11.11	2.43	-.241	11.277	-.303 54	8.7510	.2663	.6354	.4160	.1563	
	LOG DOSE	56	-1.29	1.68	11.11	2.43	-.099	10.440	-.417 54	8.7377	.2651	.0562	.2494	.1560	

REGRESSION FITS OF THE NUMBER, U, OF IMPLANTATIONS ON DOSE.
(PREDICTED, U = A + B*X)
CONTROL GROUP INCLUDED

	X	N	XBAR	SD X	UBAR	SD U	B	A	TB	DF	VARU.X	CV U	VARB	VARA	VARURAR
SINGLE TREATMENT															
1	DOSE	75	.50	.50	11.43	2.52	-.080	11.466	-.136	73	6.4141	.2216	.3451	.1711	.0855
2	DOSE	76	.44	.49	11.66	2.85	-.667	11.954	-.989	74	8.0970	.2441	.4542	.1954	.1065
3	DOSE	75	.48	.51	11.92	2.20	-.703	12.257	-1.399	73	4.7964	.1937	.2528	.1220	.0640
4	DOSE	80	.48	.50	11.79	2.73	-1.365	12.446	-2.294	78	7.0788	.2257	.3541	.1709	.0885
5	DOSE	79	.49	.50	10.95	3.09	-.826	11.353	-1.192	77	9.5103	.2916	.4807	.2350	.1204
6	DOSE	74	.45	.49	11.82	2.12	-.090	11.784	.176	72	4.5635	.1907	.2595	.1135	.0617
7	DOSE	80	.48	.50	11.57	2.81	-1.252	12.179	-2.029	78	7.6180	.2395	.3810	.1839	.0952
8	DOSE	78	.48	.50	11.54	2.54	1.265	10.932	2.240	76	6.1391	.2147	.3190	.1520	.0787
MULTIPLE TREATMENTS															
1	DOSE	68	.47	.52	11.74	3.00	.659	11.426	.926	66	9.0227	.2560	.5071	.2446	.1327
2	DOSE	76	.47	.51	11.76	2.40	-1.096	12.282	-2.038	74	5.5499	.2003	.2895	.1379	.0730
3	DOSE	77	.48	.51	11.17	2.70	-.328	11.327	-.538	75	7.3424	.2426	.3728	.1822	.0954
4	DOSE	80	.48	.50	11.94	2.27	-.517	12.187	-1.016	78	5.1712	.1905	.2586	.1249	.0646
5	DOSE	77	.47	.51	11.49	2.55	-.074	11.529	-.129	75	6.5752	.2231	.3313	.1598	.0854
6	DOSE	74	.46	.50	11.93	2.34	-.136	11.995	-.248	72	5.5322	.1971	.2977	.1379	.0748
7	DOSE	76	.47	.51	11.39	2.76	-.688	11.719	-1.110	74	7.6052	.2620	.3842	.1853	.1001

T-TEST TEST OF THE (TRANSFORMED) PRE-IMPLANTATION LOSSES IN PREGNANT FEMALES.
 (LOSSES TAKEN AS A SUBSET OF THE SET OF CORPORA LUTEA)

WEEK	CONTROL				71-22 .03 G/KG				71-22 .7 G/KG				71-22 1.2 G/KG				TEM .2 MG/KG						
	N PRG	MEAN	STD DEV	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T
SINGLE TREATMENT																							
1	18	.63	.36	18	.81	.61	34	1.068	20	.51	.33	36	1.099	19	.60	.43	35	.224	20	.94	.66	36	1.767
2	20	.43	.27	20	.69	.35	38	2.590	20	.78	.57	38	2.467	16	.58	.55	34	1.095	20	1.22	.67	38	4.865
3	20	.49	.28	18	.50	.27	36	.145	18	.70	.56	36	1.516	19	.50	.30	37	.170	20	1.21	.43	38	6.314
4	20	.44	.22	20	.61	.39	38	1.646	20	.65	.52	38	1.677	20	.92	.53	38	3.787	16	1.90	.42	34	12.590
5	20	.57	.57	19	.67	.49	37	.623	20	.57	.40	38	.002	20	.82	.61	38	1.376	20	.76	.60	38	1.028
6	20	.50	.28	19	.66	.49	37	1.239	19	.44	.27	37	.671	16	.62	.33	34	1.136	17	.73	.49	35	1.733
7	20	.64	.46	20	.59	.53	38	.270	20	.66	.51	38	.174	20	.72	.57	38	.513	20	.58	.56	38	.350
8	19	.56	.46	20	.87	.51	37	1.951	20	.52	.32	37	.322	19	.39	.29	36	1.422	20	.68	.55	37	.730
MULTIPLE TREATMENT																							
1	18	.63	.36	18	.77	.57	34	.907	14	.61	.63	30	.125	18	.66	.39	34	.228					
2	20	.43	.27	19	.62	.35	37	1.874	18	.65	.45	36	1.839	19	.64	.56	37	1.521					
3	20	.49	.28	19	.59	.53	37	.789	18	.79	.62	36	1.949	20	.69	.43	38	1.790					
4	20	.44	.22	20	.50	.39	38	.583	20	.63	.40	38	1.807	20	.63	.44	38	1.762					
5	20	.57	.57	20	.58	.35	38	.110	17	.62	.53	35	.273	20	.57	.34	38	.945					
6	20	.50	.28	19	.67	.50	37	1.323	17	.54	.48	35	.263	18	.73	.45	36	1.858					
7	20	.64	.46	20	.63	.54	38	.033	16	.71	.59	34	.434	20	.63	.43	38	.068					

T-TEST OF THE (TRANSFORMED) NUMBER OF DEAD IMPLANTS.

WEEK	CONTROL				71-22 .03 G/KG				71-22 .7 G/KG				71-22 1.2 G/KG				TEM .2 MG/KG						
	N PRG	MEAN	STD DEV	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T	N PRG	MEAN	STD DEV	DF	T
SINGLE TREATMENT																							
1	18	.43	.24	18	.52	.39	34	.893	20	.53	.39	36	.938	19	.56	.36	35	1.276	20	.90	.48	36	3.818
2	20	.55	.39	20	.41	.19	38	1.378	20	.48	.34	38	.603	16	.70	.31	34	1.249	20	1.70	.61	38	7.152
3	20	.56	.43	18	.44	.29	36	1.022	18	.49	.24	36	.614	19	.72	.46	37	1.150	20	1.55	.57	38	6.208
4	20	.47	.27	20	.54	.30	38	.821	20	.52	.33	38	.605	20	.60	.46	38	1.153	15	1.28	.49	34	6.344
5	20	.56	.39	19	.58	.35	37	.212	20	.50	.26	38	.518	20	.49	.28	38	.608	20	1.08	.50	38	3.719
6	20	.45	.31	19	.48	.28	37	.257	19	.51	.36	37	.525	16	.53	.32	34	.737	17	.52	.33	35	1.577
7	20	.50	.31	20	.52	.32	38	.142	20	.39	.24	38	1.285	20	.73	.51	38	1.665	20	.68	.36	38	1.678
8	19	.39	.22	20	.58	.34	37	1.948	20	.56	.37	37	1.687	19	.59	.37	36	1.964	20	.59	.31	37	2.255
MULTIPLE TREATMENT																							
1	18	.43	.24	18	.75	.46	34	2.663	14	.33	.14	30	1.344	18	.49	.22	34	.850					
2	20	.55	.39	19	.63	.49	37	.623	18	.41	.25	36	1.249	19	.61	.42	37	.493					
3	20	.56	.43	19	.69	.51	37	.898	18	.56	.29	36	.016	20	.49	.30	38	.600					
4	20	.47	.27	20	.90	.56	38	3.067	20	.41	.22	38	.770	20	.55	.30	38	.958					
5	20	.56	.39	20	.63	.44	38	.537	17	.46	.29	35	.822	20	.53	.27	38	.306					
6	20	.45	.31	19	.69	.45	37	1.956	17	.45	.25	35	.023	18	.44	.28	36	.154					
7	20	.50	.31	20	.70	.48	38	1.520	16	.50	.23	34	.083	20	.42	.22	38	.995					

CHI-SQUARE TEST OF THE DEATH INDEX (1 DEGREE OF FREEDOM)

WEEK	VEHICLE CONTROL				71-22 .03 G/KG				71-22 .7 G/KG				71-22 1.3 G/KG				TEM .2 MG/KG			
	N WDI	N PRG	DEATH INDEX	CHISQ	N WDI	N PRG	DEATH INDEX	CHISQ	N WDI	N PRG	DEATH INDEX	CHISQ	N WDI	N PRG	DEATH INDEX	CHISQ	N WDI	N PRG	DEATH INDEX	CHISQ
SINGLE TREATMENT																				
1	6	18	.33	0.00	7	18	.39	0.00	7	20	.35	.05	9	19	.47	.29	15	20	.75	5.07
2	8	20	.40	0.00	7	20	.35	0.00	6	20	.30	.11	12	16	.75	3.11	19	20	.95	11.40
3	8	20	.40	0.00	6	18	.33	.01	9	18	.50	.09	11	19	.58	.64	18	20	.90	8.90
4	8	20	.40	0.00	10	20	.50	.10	9	20	.45	0.00	9	20	.45	0.00	15	16	.94	8.92
5	8	20	.40	0.00	10	19	.53	.22	9	20	.45	0.00	8	20	.40	.10	18	20	.90	8.90
6	6	20	.30	0.00	8	19	.42	.21	7	19	.37	.01	7	16	.44	.25	10	17	.59	2.05
7	9	20	.45	0.00	9	20	.45	.10	4	20	.20	1.82	12	20	.60	.40	14	20	.70	1.64
8	5	19	.26	0.00	10	20	.50	1.42	9	20	.45	.78	10	19	.53	1.76	12	20	.60	3.23
MULTIPLE TREATMENT																				
1	6	18	.33	0.00	12	18	.57	2.78	2	14	.14	.68	10	18	.56	1.01				
2	8	20	.40	0.00	9	19	.47	.02	5	18	.28	.20	9	19	.47	.02				
3	8	20	.40	0.00	10	19	.53	.22	10	18	.56	.40	8	20	.40	.10				
4	8	20	.40	0.00	14	20	.70	2.53	6	20	.30	.11	11	20	.55	.40				
5	8	20	.40	0.00	10	20	.50	.10	6	17	.35	.00	10	20	.50	.10				
6	6	20	.30	0.00	11	19	.58	2.05	7	17	.41	.13	6	18	.33	.02				
7	9	20	.45	0.00	11	20	.55	.10	8	16	.50	.00	6	20	.30	.43				

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE DEATH INDEX
(1 DEGREE OF FREEDOM)
BASED ON THE DOSE LEVELS

	.03 G/KG		.7 G/KG		1.2 G/KG		
WEEK	N	N	N	N	WDI	PRG	CHISQ
	WDI	PRG	WDI	PRG	WDI	PRG	(C-1)
	---	---	---	---	---	---	---

SINGLE TREATMENT

1	7	18	7	20	9	19	.64	.23	.41
2	7	20	6	20	12	16	8.45	4.50	3.96
3	6	18	9	18	11	19	2.32	2.28	.03
4	10	20	9	20	9	20	.13	.11	.02
5	10	19	9	20	8	20	.63	.63	.00
6	8	19	7	19	7	16	.19	.00	.19
7	9	20	4	20	12	20	6.72	.57	6.15
8	10	20	9	20	10	19	.24	.01	.22

MULTIPLE TREATMENT

1	12	18	2	14	10	18	9.30	.80	8.50
2	9	19	5	18	9	19	1.94	.01	1.92
3	10	19	10	18	8	20	1.06	.55	.51
4	14	20	6	20	11	20	6.54	1.31	5.23
5	10	20	6	17	10	20	1.04	.01	1.03
6	11	19	7	17	6	18	2.37	2.33	.03
7	11	20	8	16	6	20	2.79	2.39	.40

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE DEATH INDEX
(1 DEGREE OF FREEDOM) BASED ON THE LOGARITHMS OF THE DOSE LEVELS

WEEK	.03 G/KG		.7 G/KG		1.2 G/KG		CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
	N	N	N	N	WDI	PRG			
	WDI	PRG	WDI	PRG	WDI	PRG			
SINGLE TREATMENT									
1	7	18	7	20	9	19	.64	.07	.57
2	7	20	6	20	12	16	8.45	2.03	6.42
3	6	18	9	18	11	19	2.32	2.24	.08
4	10	20	9	20	9	20	.13	.13	.00
5	10	19	9	20	8	20	.63	.59	.05
6	8	19	7	19	7	16	.19	.04	.19
7	9	20	4	20	12	20	6.72	.00	6.72
8	10	20	9	20	10	19	.24	.00	.23
MULTIPLE TREATMENT									
1	12	18	2	14	10	18	9.30	2.78	6.52
2	9	19	5	18	9	19	1.94	.27	1.67
3	10	19	10	18	8	20	1.06	.25	.81
4	14	20	6	20	11	20	6.54	3.16	3.38
5	10	20	6	17	10	20	1.04	.14	.90
6	11	19	7	17	6	18	2.37	2.29	.07
7	11	20	8	16	6	20	2.79	1.71	1.08

ARMITAGE TEST FOR A LINEAR TREND IN PROPORTIONS FOR THE DEATH INDEX
(2 DEGREES OF FREEDOM) BASED ON THE DOSE LEVELS AND INCLUDING THE CONTROL GROUP

WEEK	CONTROL		.03 G/KG		.7 G/KG		1.2 G/KG		CHISQ (C-1)	CHISQ (1)	ARMTG CHISQ
	N	N	N	N	N	N	WDI	PRG			
	WDI	PRG	WDI	PRG	WDI	PRG	WDI	PRG			
SINGLE TREATMENT											
1	6	18	7	18	7	20	9	19	.94	.49	.44
2	8	20	7	20	6	20	12	16	8.63	3.90	4.73
3	8	20	6	18	9	18	11	19	2.64	2.44	.20
4	8	20	10	20	9	20	9	20	.40	.00	.40
5	8	20	10	19	9	20	8	20	.84	.16	.68
6	6	20	8	19	7	19	7	16	.92	.25	.66
7	9	20	9	20	4	20	12	20	6.75	.23	6.52
8	5	19	10	20	9	20	10	19	3.29	1.12	2.17
MULTIPLE TREATMENT											
1	6	18	12	18	2	14	10	18	10.57	.03	10.55
2	8	20	9	19	5	18	9	19	1.95	.00	1.95
3	8	20	10	19	10	18	8	20	1.56	.05	1.51
4	8	20	14	20	6	20	11	20	7.35	.20	7.16
5	8	20	10	20	6	17	10	20	1.24	.03	1.21
6	6	20	11	19	7	17	6	18	3.69	.43	3.26
7	9	20	11	20	8	16	6	20	2.79	1.70	1.09

PROBIT ANALYSIS OF THE PROPORTION OF PREGNANT FEMALES WITH 1 OR MORE DEAD IMPLANTS
PROBIT = A + B(LOG DOSE)

WEEK	B	A	CHISQ	DF
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SINGLE TREATMENT

1	.063	4.788	.57	1
2	.343	5.059	6.34	1
3	.367	5.119	.08	1
4	-.083	4.872	.00	1
5	-.179	4.801	.05	1
6	-.023	4.753	.19	1
7	-.005	4.787	6.72	1
8	-.007	4.975	.23	1

MULTIPLE TREATMENT

1	-.413	4.719	6.77	1
2	-.122	4.708	1.70	1
3	-.117	4.916	.81	1
4	-.418	4.825	3.45	1
5	-.085	4.843	.91	1
6	-.354	4.654	.08	1
7	-.305	4.692	1.14	1

T-TEST OF THE (TRANSFORMED) NUMBER OF DEAD IMPLANTS.
 (DEAD IMPLANTS TAKEN AS A SUBSET OF THE SET OF IMPLANTS)

WEEK	CONTROL	71-22 .03 G/KG				71-22 .7 G/KG				71-22 1.2 G/KG				TEM .2 MG/KG									
		N PRG	STD DEV	N PRG	STD DEV	N PRG	STD DEV	N PRG	STD DEV	N PRG	STD DEV	N PRG	STD DEV	N PRG	STD DEV	N PRG	STD DEV						
SINGLE TREATMENT																							
1	18	.45	.27	18	.62	.51	.34	1.212	20	.55	.42	.36	.808	19	.58	.36	.35	1.233	20	1.08	.56	.36	4.320
2	20	.56	.40	20	.44	.20	.38	1.247	20	.53	.36	.38	.235	16	.74	.30	.34	1.502	20	2.34	.59	.38	12.481
3	20	.58	.45	18	.45	.30	.36	1.012	18	.55	.29	.36	.264	19	.75	.48	.37	1.139	20	2.14	.71	.38	8.306
4	20	.47	.27	20	.56	.29	.38	.970	20	.62	.53	.38	1.123	20	.69	.52	.38	1.556	16	2.56	.55	.34	14.792
5	20	.66	.56	19	.62	.35	.37	.241	20	.53	.27	.38	.916	20	.60	.41	.38	.379	20	1.26	.66	.38	3.146
6	20	.46	.31	19	.52	.31	.37	.564	19	.52	.36	.37	.495	16	.56	.35	.34	.904	17	.75	.61	.35	1.858
7	20	.54	.32	20	.56	.34	.38	.237	20	.43	.28	.38	1.108	20	.80	.54	.38	1.933	20	.74	.37	.38	1.788
8	19	.42	.23	20	.66	.40	.37	2.318	20	.59	.40	.37	1.611	19	.60	.36	.36	1.808	20	.64	.32	.37	2.525
MULTIPLE TREATMENT																							
1	18	.45	.27	18	.82	.46	.34	2.925	14	.37	.18	.30	.964	18	.54	.27	.34	.946					
2	20	.56	.40	19	.72	.66	.37	.913	18	.44	.26	.36	1.075	19	.68	.47	.37	.963					
3	20	.58	.45	19	.75	.53	.37	1.092	18	.73	.57	.36	.914	20	.53	.32	.38	.417					
4	20	.47	.27	20	.98	.69	.38	3.044	20	.43	.22	.38	.565	20	.66	.57	.38	1.282					
5	20	.66	.56	20	.66	.45	.38	.015	17	.51	.32	.35	.966	20	.55	.28	.38	.764					
6	20	.46	.31	19	.78	.57	.37	2.177	17	.48	.25	.35	.142	18	.48	.34	.35	.190					
7	20	.54	.32	20	.76	.53	.38	1.612	16	.62	.52	.34	.596	20	.46	.27	.38	.879					

CONTROL GROUP ANOVA FOR THE NUMBER OF PREGNANT FEMALES

WEEK	BETWEEN MALES			WITHIN MALES			TOTAL			F
	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF		
SINGLE TREATMENT										
1	.800	9	.089	1.000	10	.100	1.800	19		.889
2	0.000	9	0.000	0.000	10	0.000	0.000	19		I
3	0.000	9	0.000	0.000	10	0.000	0.000	19		I
4	0.000	9	0.000	0.000	10	0.000	0.000	19		I
5	0.000	9	0.000	0.000	10	0.000	0.000	19		I
6	0.000	9	0.000	0.000	10	0.000	0.000	19		I
7	0.000	9	0.000	0.000	10	0.000	0.000	19		I
8	.450	9	.050	.500	10	.050	.950	19		1.000
MULTIPLE TREATMENT										
1	.800	9	.089	1.000	10	.100	1.800	19		.889
2	0.000	9	0.000	0.000	10	0.000	0.000	19		I
3	0.000	9	0.000	0.000	10	0.000	0.000	19		I
4	0.000	9	0.000	0.000	10	0.000	0.000	19		I
5	0.000	9	0.000	0.000	10	0.000	0.000	19		I
6	0.000	9	0.000	0.000	10	0.000	0.000	19		I
7	0.000	9	0.000	0.000	10	0.000	0.000	19		I

CONTROL GROUP ANOVA FOR THE NUMBER OF IMPLANTATIONS PER PREGNANT FEMALE

WEEK	BETWEEN MALES			WITHIN MALES			TOTAL			F
	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF		
SINGLE TREATMENT										
1	31.205	9	3.467	24.500	8	3.063	55.705	17	1.132	
2	39.800	9	4.422	29.000	10	2.900	68.800	19	1.525	
3	33.450	9	3.717	21.500	10	2.150	54.950	19	1.729	
4	57.800	9	6.422	22.000	10	2.200	79.800	19	2.919	
5	79.250	9	8.806	128.500	10	12.850	207.750	19	.685	
6	26.450	9	2.939	30.500	10	3.050	56.950	19	.964	
7	25.200	9	2.800	56.000	10	5.600	81.200	19	.500	
8	73.840	9	8.204	52.000	9	5.778	125.840	18	1.420	
MULTIPLE TREATMENT										
1	31.205	9	3.467	24.500	8	3.063	55.705	17	1.132	
2	39.800	9	4.422	29.000	10	2.900	68.800	19	1.525	
3	33.450	9	3.717	21.500	10	2.150	54.950	19	1.729	
4	57.800	9	6.422	22.000	10	2.200	79.800	19	2.919	
5	79.250	9	8.806	128.500	10	12.850	207.750	19	.685	
6	26.450	9	2.939	30.500	10	3.050	56.950	19	.964	
7	25.200	9	2.800	56.000	10	5.600	81.200	19	.500	

CONTROL GROUP ANOVA FOR THE PRE-IMPLANTATION LOSS PER PREGNANT FEMALE

WEEK	BETWEEN MALES			WITHIN MALES			TOTAL			F
	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF		
SINGLE TREATMENT										
1	47.020	9	5.224	3.000	8	.375	50.020	17	13.932	
2	5.000	9	.556	10.000	10	1.000	15.000	19	.556	
3	17.200	9	1.911	5.000	10	.500	22.200	19	3.822	
4	4.000	9	.444	5.000	10	.500	9.000	19	.489	
5	68.050	9	7.561	70.500	10	7.050	138.550	19	1.072	
6	8.250	9	.917	7.500	10	.750	15.750	19	1.222	
7	76.800	9	8.533	137.000	10	13.700	213.800	19	.623	
8	67.750	9	7.528	23.000	9	2.556	90.750	18	2.946	
MULTIPLE TREATMENT										
1	47.020	9	5.224	3.000	8	.375	50.020	17	13.932	
2	5.000	9	.556	10.000	10	1.000	15.000	19	.556	
3	17.200	9	1.911	5.000	10	.500	22.200	19	3.822	
4	4.000	9	.444	5.000	10	.500	9.000	19	.489	
5	68.050	9	7.561	70.500	10	7.050	138.550	19	1.072	
6	8.250	9	.917	7.500	10	.750	15.750	19	1.222	
7	76.800	9	8.533	137.000	10	13.700	213.800	19	.623	

CONTROL GROUP ANOVA FOR THE NUMBER OF DEAD IMPLANTS PER PREGNANT FEMALE

WEEK	BETWEEN MALES			WITHIN MALES			TOTAL			F
	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF		
SINGLE TREATMENT										
1	3.480	9	.387	7.000	8	.875	10.480	17		.442
2	15.000	9	1.667	35.000	10	3.500	50.000	19		.476
3	32.800	9	3.644	33.000	10	3.300	65.800	19		1.104
4	4.800	9	.533	10.000	10	1.000	14.800	19		.533
5	35.800	9	3.978	20.000	10	2.000	55.800	19		1.989
6	11.050	9	1.228	15.500	10	1.550	26.550	19		.792
7	14.200	9	1.578	9.000	10	.900	23.200	19		1.753
8	4.928	9	.547	5.500	9	.611	10.428	18		.896
MULTIPLE TREATMENT										
1	3.480	9	.387	7.000	8	.875	10.480	17		.442
2	15.000	9	1.667	35.000	10	3.500	50.000	19		.476
3	32.800	9	3.644	33.000	10	3.300	65.800	19		1.104
4	4.800	9	.533	10.000	10	1.000	14.800	19		.533
5	35.800	9	3.978	20.000	10	2.000	55.800	19		1.989
6	11.050	9	1.228	15.500	10	1.550	26.550	19		.792
7	14.200	9	1.578	9.000	10	.900	23.200	19		1.753

CONTROL GROUP ANOVA FOR THE RATIO OF DEAD IMPLANTS TO TOTAL IMPLANTS PER PREGNANT FEMALE

WEEK	BETWEEN MALES			WITHIN MALES			TOTAL			F
	SUMSQ	DF	MEANSQ	SUMSQ	DF	MEANSQ	SUMSQ	DF		
SINGLE TREATMENT										
1	.025	9	.003	.056	8	.007	.081	17		.400
2	.093	9	.010	.238	10	.024	.330	19		.433
3	.263	9	.029	.295	10	.030	.558	19		.989
4	.032	9	.004	.060	10	.006	.092	19		.603
5	.487	9	.054	.626	10	.063	1.113	19		.864
6	.068	9	.008	.093	10	.009	.161	19		.815
7	.096	9	.011	.070	10	.007	.167	19		1.522
8	.034	9	.004	.038	9	.004	.072	18		.879
MULTIPLE TREATMENT										
1	.025	9	.003	.056	8	.007	.081	17		.400
2	.093	9	.010	.238	10	.024	.330	19		.433
3	.263	9	.029	.295	10	.030	.558	19		.989
4	.032	9	.004	.060	10	.006	.092	19		.603
5	.487	9	.054	.626	10	.063	1.113	19		.864
6	.068	9	.008	.093	10	.009	.161	19		.815
7	.096	9	.011	.070	10	.007	.167	19		1.522

T-TEST OF THE NUMBER OF CORPORA LUTEA IN PREGNANT FEMALES.

WEEK	CONTROL		71-22 .03 G/KG				71-22 .7 G/KG				71-22 1.2 G/KG				TEM		.2 MG/KG						
	N PRG	MEAN DEV	N PRG	MEAN DEV	STD DF	T	N PRG	MEAN DEV	STD DF	T	N PRG	MEAN DEV	STD DF	T	N PRG	MEAN DEV	STD DF	T					
SINGLE TREATMENT																							
1	18	13.06	1.70	18	13.89	2.03	34	1.338	20	12.00	1.69	36	1.921	19	12.58	1.43	35	.927	20	13.40	2.68	36	.467
2	20	12.90	1.74	20	13.25	2.17	38	.562	20	12.75	1.62	38	.282	16	12.75	1.84	34	.250	20	11.95	1.85	38	1.671
3	20	12.65	1.79	18	13.67	1.75	36	1.770	18	12.89	1.53	36	.440	19	12.53	1.39	37	.241	20	12.45	1.73	38	.360
4	20	13.40	2.09	20	13.10	1.62	38	.508	20	13.25	2.22	38	.220	20	13.80	2.69	38	.526	16	13.87	5.37	34	.364
5	20	12.40	1.47	19	12.63	2.06	37	.406	20	12.85	1.81	38	.863	20	12.09	1.59	38	.927	20	12.05	2.58	39	.527
6	20	13.30	1.53	19	12.42	.90	37	2.176	19	12.53	1.74	37	1.477	16	12.94	1.65	34	.683	17	12.24	1.03	35	2.440
7	20	14.10	2.81	20	13.50	2.09	38	.767	20	12.75	1.94	38	1.768	20	12.60	1.93	38	1.969	20	13.25	1.21	38	1.244
8	19	12.89	1.24	20	12.50	2.09	37	.712	20	12.75	1.59	37	.316	19	12.89	1.70	36	0.000	20	12.95	1.64	37	.118
MULTIPLE TREATMENT																							
1	18	13.06	1.70	18	13.44	2.38	34	.564	14	13.00	1.80	30	.090	18	13.94	2.53	34	1.237					
2	20	12.90	1.74	19	13.32	1.42	37	.815	18	13.00	1.53	36	.187	19	12.58	1.26	37	.656					
3	20	12.65	1.79	19	12.16	1.77	37	.864	18	12.56	1.79	36	.163	20	12.85	1.95	38	.338					
4	20	13.40	2.09	20	12.40	1.85	38	1.605	20	12.85	2.11	38	.829	20	13.40	2.14	38	0.000					
5	20	12.40	1.47	20	12.90	1.71	38	.992	17	12.88	2.34	35	.763	20	12.75	2.67	38	.513					
6	20	13.30	1.53	19	12.84	1.30	37	1.006	17	13.53	1.74	35	.428	18	13.67	1.61	36	.721					
7	20	14.10	2.81	20	12.75	1.71	38	1.836	16	12.62	1.54	34	1.882	20	12.30	1.30	38	2.601					